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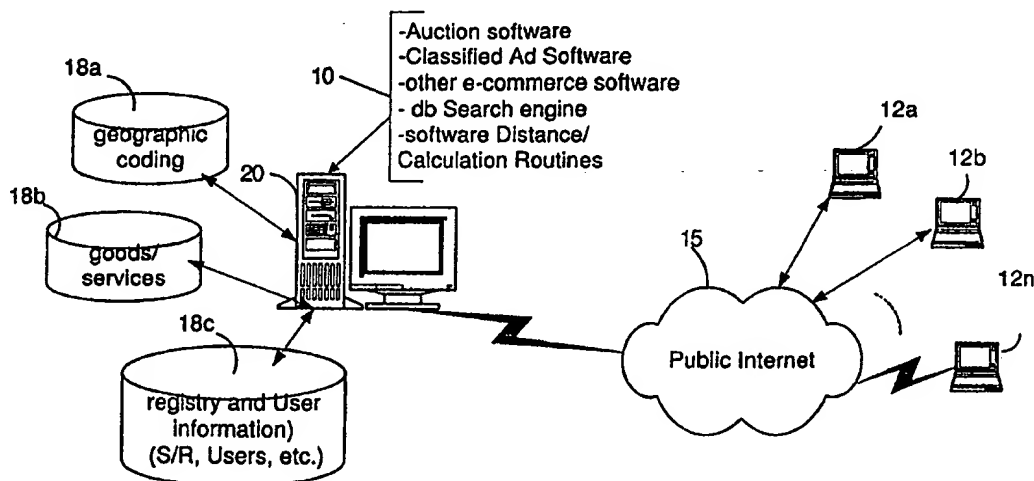
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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: SYSTEM AND METHOD FOR ON-LINE AUCTIONING/BUYING/SELLING GOODS, SERVICES AND INFORMATION



## (57) Abstract

A World-Wide Web/Internet-based system and method for facilitating the exchange of goods, services and information between buyers and sellers within a specified geographic area. The system implements a database methodology that organizes and stores information relating to buyers and seller of goods and services (18b) and associates geographic information (18a) with locations of items for sale. A buyer through a web-browser indicates a geographic distance radius and a search is conducted within the database to locate only those items indicated by the buyer that are located within that geographic distance (10). Those items are subsequently displayed and available for a buyer to purchase. Further, direct sales relationships are established locally by maintaining a registry of users that enable participation of other sellers and buyers with the system and tracking the associations of those users with the new buyer and sellers (18c).

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**SYSTEM AND METHOD FOR ON-LINE  
AUCTIONING/BUYING/SELLING GOODS,  
SERVICES AND INFORMATION**

**CROSS-REFERENCE TO RELATED APPLICATIONS**

5

The following patent application claims the benefit of U.S. Provisional Patent Application Serial No. 60/117,232, filed January 26, 1999.

**FIELD OF THE INVENTION**

10

The present invention relates generally to "on-line" commerce, and particularly to methods for buying, selling and/or auctioning and exchanging goods, services and information over the World Wide Web/Internet.

15

**BACKGROUND OF THE INVENTION**

20

With regard to the growing trend of electronic commerce, e.g., on-line (World-Wide Web (WWW)/Internet-based) auctions, classified ads, etc., the problem with auctioning heavy items, or even inexpensive items is shipping expense. In the case of a heavy item the shipping cost becomes prohibitive on a national or world-wide basis and in the case of an inexpensive item, it simply is worth less than the shipping. Many inexpensive items are simply thrown away because the natural buyer for these items are only those that are very nearby, and they are too difficult to find with present systems. In many cases the consumer wants something immediately, and the only practical method is to obtain it locally, and preferably as locally as possible. For perishable goods, they cannot be shipped great distances due to possible spoilage factors.

25

To date, this problem has been solved by offering auctions on a city by city basis, at WWW sites such as cityauction.com, which enables auctions, or generally, the selling of goods relatively locally within a pre-determined geographic area, e.g., the Philadelphia area. Depending upon the type of goods being purchased, and a desired mode of transportation and/or shipping and/or delivery of the goods being purchased, there may be two areas in the pre-determined geographic area that are not very close.

To date, not one on-line auction system or on-line publisher of classified ads on a web site enables purchasers to specify a desired geographic limitation within which they would be willing to purchase items. That is, not one on-line auction system or on-line publisher of classified ads on a web site will automatically initiate an item search based on the individual buyer's desired geographic limitation entered, and presents to the prospective buyer the results of such a search. At best, current systems may enable buyers or sellers to limit their sales/purchases geographically in a pre-determined sense, i.e., a business enters their business address information once and it is stored, such that if a business wanted to sell from a temporary or new location, they would (probably manually) have to update their information. Even though e-commerce is currently widely conducted via the Internet, there is currently not a single web site that is offering the ability to actually transact business over the net based on a user's proximity to one another.

Furthermore, to date, there is no on-line system or web-based system for facilitating creation and fostering growth of direct sales relationships among and between sellers and purchasers of goods. That is, current auction web-sites and web-based systems that enable the selling/purchase of goods and services utilize a "top-down" approach for gathering user information. These prior art systems do not facilitate the establishment of direct relationships among all the users involved, i.e., buyers and sellers, thus, prohibiting development of a direct sales-type organization.

It would be highly desirable to enable purchasers of goods, either by participating in "on-line" auctions, e.g., through a web-browser, or browsing through on-line

“classified” ad sites, to dictate a desired geographical distance for items desired to be purchased and in which the buyer is willing to travel to or willing to pay the shipping costs (or seller is willing to pay for or provide) from the purchased item’s location, i.e., local to the buyer based on their location and a radius of their choosing, and, moreover, one that will search out items based on the buyer’s (or seller’s) geographical limitations as well as other item parameters, e.g., type, age, color of item, etc.

It would additionally be desirable to enable sellers of goods, either through an on-line auction service, or, as a “classified” ad to dictate the geographical bounds within which the seller is willing to sell items.

Moreover, it would be highly desirable to provide an auction web-site and web-based system that enables the selling/purchase of goods and services to utilize a “bottom-up” approach for obtaining purchaser/seller information which remains current because the users themselves are maintaining it and which may be used to create and foster growth of direct sales relationships among and between sellers, purchasers, sponsors, and other local people helping to develop the system.

### **SUMMARY OF THE INVENTION**

In accordance with the preferred embodiments of the invention, there is provided a system and method for facilitating the exchange of goods and services, on-line, between entities that are within a certain distance as specified by the user, and, even more generally, the ability to locate people/items and exchange information, goods, or services with others based on the location of the two (or more) parties, and, the ability to communicate with other entities based on the location of the two (or more) parties. Generally, this is based on a one-to-one relationship between each of the item(s) being sold and the buyer, even though the web-site providing the auction may display general ads and general ads that are local to the user. In this type of system, the users do not know their physical proximity to one another until entering it on the system, so there is discovery. The system

constantly generates new relationships since it is always putting new people together based on items for sale and location. The distance between the buyer and seller is variable and can be set by the user at the time they are searching to buy or sell their item. The distance is based on the object for sale or service or information. Further, a shipping rate may be applied to any distance calculation rendered according to the invention in order to provide an added shipping/delivery price information to the item being auctioned/offered, thus facilitating a buyer's purchasing decision, and/or the seller's item asking price. This also provides additional functionality not currently offered in existing on-line auctions and classified ads. In addition, based on certain other system enhancements, in conjunction with the geographic relationship between parties, other new types of relationships are created between trading partners.

The methodology of the invention may be implemented by currently existing software that may be easily and readily used in conjunction with currently existing auction and/or classified ad software running on WWW/Internet (or intranet) servers that provide web sites to enable buyers to buy used items for example, as in an auction or classified ad. Preferably, the system and method makes use of geographic coding, i.e., the system for determining latitude and longitude of locations based on street addresses, and the "Great Circle Distance" or "Flat Earth" calculation which provides for the distance calculation between any two locations on the planet earth. It is understood that other methods of calculating distance may be used.

The system further enables on the fly interaction between the buyer and the seller so that items desired to be purchased may be located by incrementing radius distances by a particular granularity, e.g., one mile, and initiating new searches for each iteration. This in conjunction with the pricing and/or shipping information allows discovery of the cheapest item, which may actually be located further away, than closer, more expensive, items.

Thus, according to the invention, a capability is provided that would allow either an auction or classified ad site on the Internet to provide local auctions or local classified ads, i.e., local to the individual based on their location and a radius of their choosing. This will allow for the creation of a national (or world wide) web site, that operates locally which capability is not currently offered anywhere on the Internet. For international address locations, it is assumed that appropriate geographical information, i.e., street address/latitude/longitude correlation is available.

Further, the method of finding one another geographically enables the creation of stronger bonds amongst people in a given area, thus, fostering economic growth in a region. Transactions are now encouraged and enabled by the system that formerly would not have occurred because people could not "find one another", or because there was not enough trust to complete the transaction. Thus, when people meet and exchange cash for objects, there is less likelihood of one party being "ripped off", as has been happening with greater frequency at current on-line auctioning sites.

Advantageously, to further foster growth and establishment of economic bonds and relationships in a geographic area, the system may be used to automatically forward information such as local news and scheduled future events to Users within a distance and/or date/time specified by the user.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1(a) generally depicts the environment within which the system and method of the invention operates;

Figure 1(b) generally depicts a web site home page enabling the functionality of the present invention;



Figure 2(a) is a flow chart depicting the methodology enabling a buyer to specify  
a  
geographical purchase limitation according to the invention;

- 5     Figure 2(b) is a flow chart depicting the methodology enabling a seller to specify  
a geographical limitation for selling items according to the invention;

Figures 3(a)-3(c) is a flow chart depicting the item search methodology for  
sales/auctions according to the principles of the invention;

- 10    Figure 4(a) illustrates an example Web-enabled GUI from the buyer's  
perspective used for participating in the on-line auction system of the invention  
and Figure 4(b) illustrates display enabling specification of a range of distances;

- 15    Figures 5(a) and 5(b) are flow charts depicting the employment of sponsors and  
recruiters in facilitating system growth according to the principles of the  
invention;

- 20    Figure 6(a)-6(d) depict a database organized in accordance with the principles of  
the invention;

- 25    Figure 7 illustrates use of the inventive system for generating and forwarding to  
users information including locations and times of future (or past)  
events/occurrences pertaining to the User's interests, within a desired geographic  
radius;

- Figure 8 illustrates an example web page display depicting the ability of the  
system to perform a search based on both distance and time;

- 30    Figure 9 depicts a user registration form to be completed by a user participating  
in said system;

Figures 10(a) and 10(b) illustrate exemplary screen displayed for a user selling an item such as an automobile (Figure 10(a)) and the exemplary screen displayed for a user searching an item such as an automobile (Figure 10(b));

- 5 Figure 11 illustrates an exemplary user screen providing a drop down menu for selecting a specific date or time interval of a particular item's availability.

### **DETAILED DESCRIPTION**

- 10 Figure 1(a) generally depicts the environment 10 within which the system and method of the invention operates. As shown, a plurality of prospective Buyers or Sellers and/or exchangers of goods, services or information ("Users") 12a, 12b,...,12n employ PCs, workstations, or other devices having Internet/Web-based browsing capability (e.g., via commercially available browsers such as
- 15 Netscape 5.0, Internet Explorer 5.0 or greater, and the like). Via typical telephone, cable, RF or other wire or wireless connections, Users may enter into web sites over the Internet 15 which include one or more web-servers 20 including, for example, an SQL server and Windows NT, running the on-line auction software or an on-line classified advertisement service either
- 20 commercially available or developed in-house. As shown in Figure 1, and explained in greater detail below, the system includes one or more databases 18a-18c for storing all of the information necessary to run the system of the invention, and provides a real-time search engine for tracking and retrieving the information. Preferably, the system of the invention is embodied as software,
- 25 e.g., written in ColdFusion (<http://www.allaire.com>) , and is easily integrated into current on-line auction software [e.g., such as provided by Opensight- Opensite Technologies Inc. P.O. Box 12542, Research Triangle Park, North Carolina 27709 (Opensite.com)], classified ad software or, other e-commerce software that provides Web/Internet based auction, sales or other "e-commerce" functionality.
- 30 It should be understood that, in some figures, for the case of auction bidding where the bidding is downward bidding, i.e. various sellers of contract services

are bidding progressively downward on a contract, then, the words Buyer and Seller as used herein, are reversed.

5 Via the Web, a typical auction/classified ad system affords "world-wide" availability. However, as will be explained in greater detail below, the system of the invention provides proximity calculations, e.g., at a granularity of miles, for facilitating the transacting (selling/purchasing) of goods and services at a "local level." The "localness" afforded by the system may be exploited for facilitating the creation and fostering the growth of direct sales relationships between Users,  
10 i.e., Sellers and Buyers of goods. The system of the invention maintains and tracks these direct sales relationships.

Figure 1(b) depicts a web based communication, e.g., a web page 50, offered to Users of the system to enable entry into a Classified Advertisement service  
15 incorporating functionality according to the invention. As depicted, the web page 50 includes links 55 enabling User's to search out products or services in a variety of general categories. A search bar 70 is provided for enabling the search functionality within a specified radius. For example, as shown in Figure 1(b), the search bar 70 includes a search item entry field 58 enabling a user to enter a  
20 search term, and includes a drop-down menu 80 enabling a user to enter a specified search radius, e.g., in units of miles, and a drop-down menu 85 enabling drill-down of specific categories for a selected general category 55. As will be described in further detail herein, Users such as sellers are able to place ads within the system by selecting a link 60 or, are additionally able to receive a list  
25 of Sponsors by selecting a link 65. As will be described, Sponsors are people that, for a small commission, provide services that may be beneficial to sellers desiring to participate or enter in the system for advertising goods/services. Thus, in an alternate embodiment, for example, a user may enter the word "scanning" in entry field 58 and choose the category "Sponsors" from the drop  
30 down menu 85 to enable a search for Sponsors in their area who can provide scanning services.

Figure 2(a) is a flow chart depicting the process according to one aspect of the invention. In the scenario depicted, a Buyer (or Bidder, in the case of an auction system) specifies an area (radii) within which they would like to purchase items. As a preliminary step, it is assumed that a Buyer has dialed into or otherwise  
5 accessed the Internet, and have pointed their browser to a URL for access to an on-line auction or the on-line classified advertisement system such as shown in Figure 1(b). Additionally, a Seller selling items may have previously registered on the system by specifying their address and the type of goods/services for sale. The steps according to this aspect of the invention include:

10 Buyer enters item(s) to be purchased and search criteria, i.e., category, which may include a detailed description of the item (step 102) and a price which the Buyer (or Bidder) is willing to pay. Then, a decision is made as to whether Buyer is to purchase item from their own location (step 104). It is understood that  
15 the Buyer and Seller may buy or sell from a variety of locations of their choice. If the Buyer does not specify purchase of an item from their own location, the process obtains the street address of the buyer's purchasing location (step 108), performs a verification if required (for example, via techniques including, but not limited to: credit card address verification, mail/e-mail verification, credit  
20 reports, driver license verification, a caller-id system that matches the dial in phone number (e.g., the modem line) to available databases in order to match the address), and, determines the seller's latitude/longitude, for example, by "geographiccoding" (step 112). Geographiccoding is the preferred process where the address is located in a database and a corresponding latitude/longitude are  
25 determined. This geographiccoding process is well known and has been done by the U.S. Census Bureau in their Tiger files, which include both street address information and latitude/longitude information. The system software will search for the appropriate address in the file then look up the appropriate latitude/longitude. As an alternative to the use of Tiger files, various third party  
30 software may be used for geographiccoding, which implement files in a binary format that works faster, e.g., a database file format (DBF). For example,

Bamberg-Handley [3377 Forsyth Road, Winter Park FL 32792] offers a database that allows address-to-latitude/longitude conversions in a DBF file format, with software for searching through the addresses. This system is incorporated by reference as if fully set forth herein. Figure 1(a) depicts the provision of a  
5 database 18a for providing all geographic coding system information for determining distances. It is understood that other methods may be used either alone or in combination with geographic coding to find distance approximations. For example, other approximations for geocodes could be obtained by users who possess a local landmark's latitude/longitude designation, or that of a nearby  
10 street corner intersection. Alternately, users may enter their current location's latitude/longitude designation if they know it.

Returning to step 104, if the Buyer does specify to purchase an item from their own location, a decision is made as to whether Buyer's latitude/longitude  
15 location is already known (step 106). If the Buyer's latitude/longitude location is not known, the process determines the Buyer's latitude/longitude by "geographic coding" or any of the above-described techniques (step 110). Once the system has located the appropriate latitude/longitude it will be put in the record that contains the buyers information, so that unless modified, the buyer's  
20 latitude/longitude will always be known. A decision is then made as to whether Buyer wishes to specify a distance within which item is to be purchased (step 115). If the Buyer specifies a distance, the Buyer enters onto the system the radius (or diameter, or square miles, or other unit of distance) of the number of miles they would like the search to be conducted (regions other than circles may  
25 be determined, e.g., a region outside of a particular circle, or within a circular band region) and a variable representing the specified radius distance is set (step 118). If the Buyer does not specify a distance, a flag is set indicating that there is no radius distance limitation for this Buyer (step 120).

30 Continuing to step 150, Figure 2(a), the system software executes a search to meet the buyer's criteria including item to be purchased, desired price/bid, and

distance which is represented by the distance variable (step 150). At the Users' option, additional parameters such as type of object they wish to buy, the item condition, e.g., new, used, etc. or type of item such as age, etc. may be added so that the search could be done all at once for the appropriate items. The search engine implemented by the system may include natural language parsers that try to understand the meaning of all words, and also learn from the placement of words in the entry field. A database search engine that functions in the manner disclosed in commonly-owned, co-pending U.S. Provisional Patent Serial No. 60/137253 filed June 2, 1999 entitled "Method for Searching a Database", the contents and disclosure of which is incorporated by reference as if fully set forth herein, may be implemented alone or in conjunction with the natural language parser search engine. Figure 1(a) depicts the provision of a database 18c used to store and track all information pertaining to Users of the system, i.e., Buyer/Seller information.

Figure 4(a) illustrates an example GUI 21 downloaded to a Buyer web browser at his/her PC or workstation. As shown in Figure 4(a), typical auction software provides the user web browser with a web page including the following entry fields: an entry field (22) enabling entry of a particular item a Buyer wishes to purchase; and entry fields specifying maximum, minimum, or range of prices (entry fields 26a, 26b), and autobid features which enable entry of minimum (31a) and maximum (31b) amounts that a buyer is willing to have the system automatically bid for a particular product. It should be understood that other entry fields may be provided to enable entry of other parameters relating to the item(s) desired. Moreover, other information will appear on this screen such as a shipping option (i.e., does the Buyer want additional information as to terms and availability of product shipment), an initial offering price of the auctioned product, and the option of seeing a picture of any products that are found as a result of searching.

In accordance with the invention, the web page downloaded to the browser's web

page further includes an entry field (24) enabling entry of the preferred radius value (geographic distance in any units, e.g., miles, kilometers, etc.) which is used by the auction software search engine to limit the search for the desired item to within a radius surrounding the Buyer's purchasing location (the User may in addition or, alternately specify a minimum range, e.g., greater than 30 miles, or, a range, e.g., between 30 and 40 miles, as enabled by the drop down menu columns provided in the GUI display illustrated in Figure 4(b)).

Alternately, or in addition, a Seller may also dictate the geographical bounds within which the seller is to sell items (or provide services). For example, a Seller may only be willing to offer a service or sell a product within a certain distance radius, e.g., in accordance with a particular state/local licensing regulation (for example, "within 20 miles and within the state of PA"), or, specify a geographic distance in which they are willing to pay for shipping. Figure 2(b) is a flow chart depicting the methodology of the invention for the case where the Seller enters the system offering products/services and would like to specify an area (radii) within which they would like to sell items or provide a service. It is understood that a Seller selling items may but are not required to pre-register on the system by specifying their address and other pertinent information which is stored in database 18c (Figure 1(a)). The steps according to this aspect of the invention include:

Seller enters item(s) to be auctioned or put up for sale (step 122). Then, a decision is made as to whether Seller is to sell item from their own location (step 124). If the Seller does not sell an item from their own location, the process obtains the street address of the location where the item is to be sold (step 128) and determines the item's latitude/longitude, for example, by "geographiccoding." (step 132). The latitude and longitude determined by the geographiccoding is associated with the record of the item to be sold. (step 135). If, at step 124, the Seller is able to sell an item from their own location, then a decision is made as to whether Seller's latitude/longitude location is already known (step 126). If the Seller's latitude/longitude location is not already

known, the process determines the seller's latitude/longitude, e.g., by "geographiccoding." (step 130). It should be understood that at steps 128 and 130 an optional address verification may be performed if required, for example, in accordance with the herein mentioned techniques. It is understood that if an address verification is performed, an indication may be stored with Buyer's/Seller's record. Once the system has located the appropriate latitude/longitude it will be put in the record that contains the seller information, so that unless modified, the seller's latitude/longitude will always be known. The latitude and longitude determined by the geographiccoding is then associated with the record of the item to be sold. (step 135). In the system, in a matter of seconds, the database is updated with any new information from the seller, such that if a seller has a sale item, it is immediately available for sale. Not only do current systems not allow the display of the item, the basic information they provide is delayed, which would defeat the purpose of last minute sales, or items that must be sold quickly.

Continuing from step 135, a decision is then made as to whether the Seller wishes to specify a distance within which an item is to be sold or service offered (step 138). If the Seller wishes to specify a distance, the Seller enters onto the system the radius (or diameter, or square miles, or other unit of distance) of the number of miles they would like to search (other regions than circles could eventually be determined) and a variable representing the specified radius distance is set (step 140) and added to the record of the item to be sold. If not, a flag is set indicating that there is no radius distance limitation for this buyer (step 142). Whether or not a distance radius was set by the Seller, the Seller must provide the information of items/services to sell/auction including the price, location and time that offer is valid (step 145). Figure 1(a) depicts the provision of a database 18b used to store and track all information pertaining to goods/service offered for auction or sale including any location and distance range information associated therewith.



Figures 3(a)-3(c) illustrate the search procedure conducted by the auction/classified ad software implementing the methodology of the invention. It is assumed that the bidder/Buyer have previously entered their address, and all vital information such as the buyers location, distance etc. are stored in the database 18c (Figure 1(a)). Further, the 18c maintains records of Sellers, their goods and services for sale/auction, and the address locations of the items for sale/auction.

10 The search conducted by the system is performed to meet the buyer's criteria including item to be purchased, desired price (bid), and distance which is represented by the distance variable (Figure 2(a)). As shown in Figure 3(a), the search conducted by the Buyer/Bidder includes obtaining the latitude and longitude location of the item(s) to be purchased are determined (step 155).

15 Then, a distance is calculated between the item's location (taking into account of whether the item to be purchased is located at the Seller or, at a location different from the Seller) and the Buyer's purchasing location (step 160), e.g., by executing a well-known "Great Distance", "Flat Earth", or other like distance calculation between the two. Then, a determination is made as to whether the

20 calculated distance is within the specified radius (step 165). For example, if the Buyer/Bidder specifies a 20 mile radius, then the software will use the distance variable (Buyer's radius distance) and compare it against the distance calculated at step 160. If, at step 165, it is determined that the calculated distance is outside the specified radius, then the item will not be displayed at the Buyer's GUI (step

25 168). If it is determined that the calculated distance is within the specified radius, then the process continues by making a determination as to whether the Seller has specified selling distance limitation (step 170). If the Seller has specified selling distance limitation (stored in the database record), then a determination is made as to whether the calculated distance (step 165) is within

30 the Seller's distance range (step 175). If the calculated distance (step 165) is not within the Seller's distance range, then the item will not be displayed at the

Buyer's GUI (step 180). If, at step 170, the seller has not specified distance limitation, or, at step 175 the calculated distance is within the Seller's distance range, then the item(s) will be available for bidding/purchase and are displayed at the Buyer's /bidder's GUI (step 190). Referring back to the example GUI

5 presented to a Buyer at his/her PC, workstation or other device having web-browsing functionality as depicted in Figure 4(a), the auction software may be modified to present to the user an additional display field 35 indicating the found item's distance from the Buyer's purchasing location for each item found from the database search (if within the specified distance radius) thus facilitating the

10 Buyer's decision to continue bidding or make the purchase, as the case may be. It is understood that, as well known in the art, a buyer may actually pay for their items on-line (i.e., with an electronic check or credit card), so that the system is e-commerce enabling for local transactions. That is, a Seller may obtain a merchant account for charging credit cards and checks on line. Thus, continuing

15 in Figure 3(a), when the buyer has decided to perform a purchase, a decision may be made as to whether the buyer is to be immediately billed (step 191). If the buyer is to be billed, then a process is initiated to accept credit card payment, for example, and notify Seller that they payment funds have been transferred for the item purchased (step 193). Otherwise, the buyer will notify the seller

20 themselves, for example if another billing/payment scheme is to be arranged (step 195). The DueSeller table 695 in the database (Figure 6) maintains data of much is due each seller at any given time. As the sellers are paid, negative amounts in the amount field are entered. It is understood that by allowing users to enter credit card information (or other payment systems) a User can pre-purchase

25 items at seller locations in their neighborhood and pick them up or have them delivered. Additionally the items may be ordered by the Seller if the Seller does not have them in stock. Current systems that are based on localness do not provide this service because they do not provide any detail of what is being sold at the establishments. Without this detail and without offering these payment

30 systems current systems do not provide any practical e-commerce capability. A user can simply call or visit their local shop based on current systems.

Additionally, the store may be contacted and the items can be packaged and waiting for the Buyer.

The Buyer's purchasing decision may also be influenced by the total cost of the item(s) purchased including any cost involved in shipping, transport and delivery of the purchased item(s). Thus, in Figure 3(b), there is depicted an optional step of determining whether the Buyer wants current shipping information (step 182) for the item(s) prior to a potential purchase. Thus, if the Buyer does not request shipping arrangements to be made, then the item(s) will be available for bidding/purchase, and displayed via the Buyer's/bidder's GUI (step 190) without this additional information. However, at step 182, if the buyer has indicated a desire for shipping information prior to bidding/purchase then a determination is made as to whether Buyer wants to enter a shipping cost of his own or that of which he is aware (step 184). If, at step 184, Figure 3(b), the Buyer enters a shipping rate/cost, the buyer enters the rate (e.g., or an average shipping rate of available shippers) (step 185) and that amount is multiplied by the distance for each search result item found (step 187). Specifically, a SET RATE variable may be set and the calculated result is added to the column of the display for each item (as is an additional column which sums the price and the cost of shipping). If, at step 184, it is determined that the Buyer has not entered a shipping rate, then for each record of item that is found as a result of the distance calculations, a search is then performed for shippers who may provide this service in this region (step 186). This search may include a real-time database table lookup in a database (not shown) maintained for storing currently available shipping information. Shipping services information maintained by the system would be stored in an Shipping\_Services table 678 in the database of Figure 6 and include such variables as: an 'Itemid' variable which is the Item ID (everything on the system has an item id even though services such as shipping are not really items). Each available time block for each shipper gets a unique itemid; 'prid' variable which is the Product ID; a 'seqnumber' variable which represents a sequencing number used in case more than one record is needed for

shipping. For example if the shippers availability occurs over multiple days; a 'price' variable indicating the price per mile (or unit) if known upfront; a 'title' variable which represents the title of the ad (used for keyword search, which may be further indexed). This is where a user would pick the keywords the person shipping the object will search for; 'start' variable representing a starting date/time (multiple records for a single shipper will be maintained if they are available over multiple periods of time). It is understood that a start time correlates with the beginning point of the shipping; an 'ending' variable representing the ending date/time of the particular availability. (an end time correlates with the ending time of any shipment engaged even though they may have many shipments between the start and ending time); a 'picturefile' representing the name of the picture file that is stored on the System server, for example, if they have included a picture of their truck; a 'picturefileclient' representing the name of the picture file that the client used (in case they want to edit/change their picture); a 'fulldescription' variable representing an entry field for any comments the user may want to add; and, a 'Mileageforpickup' variable representing an amount of miles from their current location that the shipper is willing to travel to pick the item up; a 'Mileagetraavel' variable representing the amount of mileage they are willing to travel for the delivery. In most cases this will be the same as the mileageforpickup, since this is mostly for local deliveries; a 'Chargeforpickup' boolean variable (true or false) indicating whether the shipper charges the client for the mileage to initially pick up the item (or just for the delivery miles themselves); and 'TravelDirections' indicating general directions the shipper is willing to travel from current location, mostly for longer distances. Codes determine the combination, and only designate down to NW level, so choices are N,S,E,W, NE,NW,SE, and SW. If more than one designation then the number increments, for example: 1 = N; 2 = NW; 3 = NE; 4 = N and NW, etc. Continuing to Figure 3(b), for each shipper found , the table lookup is performed to determine each available shipper's cost (e.g., dollars/cents per mile) for multiplication by the number of miles. The result is then added as a separate field to the results display (Figure 4(a)) to indicate the item's cost, the

shipping cost, and the addition of the two (step 188). It should be understood that the user may modify the display to sort on the column of their choice (i.e. total cost of object). Additionally, the system enables a User to enter a preferred shipping criteria, for example, a preferred shipping time, a cheapest shipper, or most reputable shipper. The system will automatically choose those shipper(s) that match the user's shipping criteria (i.e., no more than 1 negative complaint, the cheapest shipper, etc.). In this regard, it is understood that the "quality" of the shippers (e.g., measured in terms of complaints or other rating system) may be maintained in the same fashion as the quality of the buyers/sellers are on current auction sites. This functionality, for example, is available in the Opensite software and is easily created using ColdFusion. From the foregoing, it is understood that it is advantageous for a buyer/seller to expand their range to be very large and, enable the system (Buyer) to sort based on the total cost of the item (cost of the item + shipping cost) because the cheapest overall cost may be farther away than the originally specified radius. Therefor, the system enables the user to make a more informed decision than currently available systems.

In a more advanced version, the actual land transportation driving distance between each item and the buyer may be calculated in accordance with known algorithms, and a more exact estimate of the shipping cost may be made. Thus, instead of doing a simple distance calculation between two points, the system would, for each item that is found, calculate the distance to travel the specific streets between the buyer and seller. It would then determine exactly what the shipping charges would be based on the correct mileage from seller to buyer and provide that information to the person paying for the shipping. The System may additionally be modified to calculate full routes, (multiple buyers/sellers), and calculate a "fair" charge based on distance between a particular buyer/seller and the overall cost of running the route (i.e. how did this particular buyer/seller pair affect the cost of running the entire route). The information for traveling specific streets is available from third parties and is easily integrated into the system by using the starting and ending points of the delivery, the true distance

(whether approximate or not) and calculating the cost for delivery based on distance and/or time since these third parties also have the average road speed for many roads. Additionally, in a more advanced system, multiple shippers may deliver one item and they could coordinate via the system as the system provides information enabling the scheduling of a time and place where they can meet.

It should be understood that the determination of shipping may itself be performed as an auction contest, whereby the Buyer bids on shipping services or, alternately, the Shippers themselves bid. Thus, returning to Figure 3(b), once a result indicating the item's cost, the shipping cost, and/or the addition of the two (steps 187,188), a decision is then made as to whether the Buyer is to bid on shipping services, or whether shippers are to bid based on Buyer's/sellers delivery (step 189). If there is no bidding at step 189, the process exits. If there is bidding for shipping services, then a determination is made (step 200) as to whether the Buyer has chosen either: (1) to Buy a specific item , i.e., is COMMITTED (step 202), or (2) is just researching shipping information and is TENTATIVE about committing to a purchase (step 204). A variable is accordingly set at respective steps 202 (Tentative) and 204 (Committed). Regardless of the Buyer's intentions, continuing to Figure 3(c), if a buyer/seller wants to research shipping information in greater depth, the process then makes a determination as to whether the Buyer/Seller of shipping services (referred to as shipping purchaser or "SP") is interested in putting their shipment up for TENTATIVE bid (steps 210, 212 Figure 3(c)); or, (2) is interested in viewing specific scheduling information to ascertain available times in order to make a TENTATIVE bid on specific times (or range of times and dates) being offered (steps 220, 222); or (3) simply TENTATIVELY picking a currently available best firm quote from a shipper (firm in the sense the shipper is absolutely offering this shipment at this cost, but clear to the shipper that this may not happen, so they do not have to commit to the actual shipment), and schedule a date/time (step 230). The system is setup such that TENTATIVE is clearly labeled on all bids/offers that are tentative and NO tentative bid/offer may outbid

a firm bid/offer. Clearly a TENTATIVE bid is met with a TENTATIVE offer, and vice-versa. It should be understood that negotiations and rate quotes may take place without specific dates/times.

5 In a preferred embodiment, it is understood that a shipper may enter their own criteria for shipping availability. For example, Figure 3(d) illustrates a situation where the Shipper inputs their criteria (step 235) for shipping availability such as maximum radius of availability, times of availability, any special restrictions, the prices for the various times/dates, fixed pricing, and any specials offered.

10 Shippers may input last minute offers, for example, proposing for \$50 an offer to ship a purchased item between these two points for the next 4 hours. This is put in the shipper database and can be viewed by anyone at anytime (step 240). This information is available for use immediately by purchasers so that in the case of a canceled delivery, a new purchaser may make use of the idle time of a delivery

15 person/truck.

Shippers may additionally enter their schedule if they choose, and the system can help them bid on jobs that are appropriate based on their schedule and availability (step 250). Shippers may also bid on previously arranged schedules

20 created by the System based on the current needs for shipments throughout the System. (of course, system offers calculation of least distance/cost route) (step 260).

With further regard to the implementation of shipping/shipping purchase options, shippers may: 1) bid on specific deliveries that are currently available on the

25 System; 2) simply put specific times/dates up for bid, and offer their services to the highest bidder. (including an ending date/time for the auction so the shipper can plan their schedule); and, 3) receive e-mail notifications of shipments that they would be able to ship, for shipments that have been put up for bid.

30 The shipping option availability offered by the system of the invention is easily

implemented in auction/classified ad software and may shipping services may be 'bid' for, as done for regular auctioned items. The System 10 allows the integration of shippers/buyers/sellers such that the shippers can become integrated and work like a much larger company, yet still operate independently.

5 For example, a shipping company A may pre-arrange (or bid) a daily rate with another local shipping company B so that B knows A's daily rate for a certain truck (and a certain number of workers.) Based on current market conditions in A's market, it may make sense for A to simply work on a job for B. This helps A by providing work for A (or at least A's truck) and potentially higher pay work, and B, by getting a job done that might not have been done at all.

15 A benefit of the system of the invention is that the individuals on both sides of the transaction are informed, i.e., they have a new relationship that is shown to them from the resulting data provided by the System that the parties would not otherwise have known. In the case of auctions or placement of classified ads, they know some of the details of what is being offered. In the case of just a distance calculation system, they know the distance, but no details. However, according to the invention, when the two are combined, the users know that their goods/services/etc are both nearby and specifically, what is available, and whether it is immediately worthwhile to pursue phone calls, research, expense, etc. This saves the buyer (and seller) significant time and expense. They are made immediately aware of the practical options available.

25 Thus, the invention departs from current auctions/classified ad type software systems on account of: (1) it is based on distance and specific items for sale; (2) the items for sale are potentially put up by both individuals and business and the search results can be interspersed; (3) there is a negotiated price in the case of the auction format; (4) a calculation is made that is dynamic and real-time and offered on both ends of the transaction; (5) it offers the option of searching based on time and dates, such as events; (6) it enables on-line e-commerce such that a seller can immediately sell an item and charge a credit card on-line (and then the



seller can package up the items sold for pick-up or shipping); (7) it is real-time and allows for dynamic information exchange based on distance; (8) it offers the ability to integrate with their inventory/scanning system if they have one; (9) it does not use political boundaries or any boundaries thus obviating the problems associated with crossing boundaries; (10) is simple to understand as users only have to specify a distance; (11) it creates a much more efficient market by allowing for the "pre-ordering" of items from stores such that if a consumer desires an item that is not in stock, the store can order it from their supplier (or make the item) thus pushing back to the ultimate producer of the item who can produce items on an as needed basis for the ultimate consumer, while still utilizing the current local supplier; and (12) it can determine the best price, including shipping, even if the cheapest item is further away. In other words, both the buyer and seller interactively enter information including address information. The result of using the system is that in one session, a distance search and shipping arrangement transaction is facilitated; and, (13) it offers detailed searching down to very close distances (i.e., one-quarter mile) so that the system facilitates true commodity item such as a \$10 used desk..

As mentioned, a problem exists when auctioning or selling heavy items, inexpensive items, or perishable items. The problem with auctioning heavy items or inexpensive items is shipping expense. In the case of a heavy item the shipping cost becomes prohibitive and in the case of an inexpensive item, it simply is worth less than the shipping. This will also create efficiencies in industries such as used furniture, where currently an item is moved twice before reaching its final destination (once to used furniture dealer, then to the final recipient) .

From a User perspective, shipping is integrated into the system such that Buyer's have only one place to go in order to get their used furniture (or other heavy local items) such that it is a one step process. In addition to the geographic coding being used for fixed price or bidding issues, it is used to create schedules for

shipments, or, individual pick-ups or deliveries, that may be bid upon by a variety of local shippers that have joined the system. The furniture buyer picks a time/place for the item to be picked up and the place where it is to be delivered, and they schedule it. The shipper can then better plan their schedules for  
5 delivery, and the consumer gets a cheaper price due to bidding. For the instance of buying/auctioning large heavy items, e.g., furniture, once this system is in place, a Seller only need take a picture of their item, and put it up for auction or sale. The new owner moves it directly from the seller's place to their own. This will also allow certain items added life, since things normally thrown away, such  
10 as a cheap lamp, might actually find a use in somebody else's home.

On current systems, it is difficult to find others who are selling goods, locally, even if they live in the same building. In the system of the invention, a user may learn that furniture is for sale in their own apartment building, for example.  
15 Current auction/classified ads so not offer this functionality, and one cannot even learn if they are selling from the same address/street. For perishable goods, they cannot be shipped too far due to possible spoilage.

Preferably, a shipping rate may be applied to the distance calculation result in  
20 order to supply added cost information to the item being offered. This provides additional information that allows a user to bid on an item with the knowledge of its full (including shipping) cost. In addition, the system could find the closest item currently for sale, thereby saving the user travel time. The list could be sorted by distance or cost or both. (In a more sophisticated version it could  
25 determine the closest driving distance, by traveling street-by-street to determine the true shortest route)

It is assumed that general functions such as e-mail notification of availability of items and bidding will already be included in the off-the-shelf software. That is,  
30 once someone signs up for "bikes within 10 miles under \$35", then they are sent

an e-mail when one becomes available. This e-mail capability extends the reach of the system and draws people to the site.

As mentioned herein, a further benefit of the invention is that the "localness" of the system may be exploited for facilitating creation and fostering growth of direct sales relationships among and between sellers and purchasers of goods.

Figures 5(a) - 5(b) depict the process for setting up a user-sponsor relationship according to another aspect of the invention. In Figure 5(a), a User will first register with the auctioning (or classified advertisement) system by entering information on a registration form via their web browser, the information including a mailing address or other designation that enables quick determination of a latitude/longitude (step 1001). As defined herein, a "User" is a person that either searches (for goods or services) or places ads (e.g., classified ads) at the site.

Referring back to Figure 5(a), the next step depicts a User, i.e., a person with an advertisement for sale of goods or services, who is interested in putting their item (goods/services) up for sale in, a local sense, via the system web site. Particularly, according to this aspect of the invention, the User, via his/her web browser, may first search the database for a "Sponsor" who may be an organizer, flea market operator, etc., or a person that provides services, such as scanning or consulting services, for assisting the User in placing their ads on the system web site (step 1010). Particularly, via a web page display, the system enables a User to search for a Sponsor who has already registered in the system as an entity providing services and whose latitude/longitude designator has been determined. A determination is made as to whether the User has specified a distance radius they are willing to travel to meet with a Sponsor providing the service (step 1012). If a distance radius was specified, a database search is conducted for Sponsor assumed to be "locally" available, i.e., the User is willing to travel a certain distance as indicated by the location (lat./long. designation) of the

Sponsor, to personally meet with the Sponsor and provide all the services necessary for assisting the User in the manner specified (step 1015). Alternately, it is understood that the Sponsor may indicate a distance radius that the Sponsor is willing to travel to meet the User, and the search may be conducted according to the distance a Sponsor is willing to travel to meet with a User (step 1020).  
5 Generally, Sponsors may list their services on-line and will eventually even be able to auction their services as well, based on a distance calculation as described herein. The services may include typing or scanning services, e.g., for generating a digital representation, e.g., an image for display, of the User's product to be auctioned and/or advertised for sale via the System, and/or may include  
10 consulting services, e.g., providing the User with informative business ideas for selling, displaying goods/services via the System. The Sponsor, in return, will earn a commission from the System, and additionally, may receive a separate fee from the user. One critical role of the Sponsors in this system, is to determine  
15 that the User is "real" and that a fraud is not being committed. It is understood that a Sponsor is not required to provide services for a client.

Figure 5(b) depicts the next step where an arrangement is made between the parties involved, i.e., the Sponsor and the prospective User to determine if they  
20 are interested in working together (step 1030). This may include a face-to-face meeting or other telephonic communication.

In contrast to the listings of Sponsors, the System includes a listing of "Recruiters" who are defined as persons who convince others to place ads (or  
25 possibly search ads) on the System. Recruiters earn a commission based on revenues the System receives from those people (Users) they have convinced to join. These fees could be direct commissions, or indirect through revenues earned by the Company by having increased traffic. Recruiters, at least initially, are expected to determine that the User is "real" and that fraud is not being  
30 committed. Initially, a Sponsor may be thought of as a Recruiter, as the Sponsor has personally met or communicated with the User and has enabled the User to

join the system, by providing a service and placing an ad for the User in the system. Thus, initially, the Sponsor/Recruiter ("S/R") will earn both fees. As an example, a User enters the system and chooses an S/R by entering the particular S/R's ID code when they pay for the System. The S/R is then, in turn,  
5 compensated. If the User signs up for a 1-year subscription then the S/R is to be compensated over the course of a year, or, a quarterly basis, with one-quarter ( $\frac{1}{4}$ ) of the yearly commission paid at the end of each quarter. If the User signs up on an ad-by-ad basis, then the S/R is compensated when the ad runs. In order to create a further incentive for Users to choose a S/R, S/R's offer Users more free  
10 ads than they would normally receive simply by typing in the S/R's user Code when they sign up for the System. Thus, from a User perspective, they are getting a better deal by using the S/R, and from a Sponsors/Recruiters perspective they have an easy sale, and the ability to earn cash in the future when the business or individual actually pays for the ads.

15 When first recruiting a User, a S/R may get ten percent (10%) (as a Recruiter) plus twenty-five percent (25%) (as a Sponsor) of revenues for a total of thirty-five percent (35%) commissions. It is understood that a Sponsor/Recruiter must place an ad at the site giving their address (or some other designation) that allows  
20 the System to determine latitude/longitude and enable proximity calculations in the manner described herein. As previously mentioned, the S/R may specify the amount of distance they are willing to travel to help a User join the system (and earn a commission).

25 Finally, in Figure 5(b), there is depicted the case of a relationship having been developed between the Users and Sponsor/Recruiter as enabled by the System (step 1040). If the User is happy with the S/R's services and arrangement, the S/R continues to earn commissions from the system (step 1050) as the database provides a linking between the User and the Sponsor/Recruiter. That is, on a  
30 periodic basis, e.g., every month, the system calculates how much is due each sponsor by searching a Client\_Sponsor table 638 (Figure 6) to see who is the

User's (Client's) current sponsor. Then the system searches for specific payments that have been made (not implemented yet) and multiplies this by their commission percentage (currently 25%) for Sponsors. This is additionally applicable for the case of recruiters (a person is initially both a recruiter and a sponsor for a client), except recruiters currently earn 10%. (so a total of 35% if they are both a recruiter and a sponsor).

Returning to Figure 5(b), however, if the User is not happy with the Sponsor, this Sponsor loses their sponsor commissions for this user (e.g., their commissions are reduced by 25%) but still earns Recruiter commissions (step 1060).

Thereafter, the User, via the System, may search out a new Sponsor to support them (step 1070). If a new Sponsor is found, the new Sponsor is not considered a Recruiter and hence, will only earn the 25% Sponsor fees and not the Recruiter fees. The incentive to earn commissions and attain a Recruiter status by convincing other Users to join the system, enables growth of the system. By providing distance calculations, in a direct sales environment offered by the System of the invention, local economic growth for a region may grow. Thus, to perpetuate receipt of commissions from the system, Sponsors/Recruiters have, as their goal, to: 1) keep the information on the System current; 2) get as many people/businesses as possible to join the System; and 3) enable as much products/goods/services onto the System to be available for sale and increase the number of people visiting the site. Not unlike a direct sales relationship, if S/R X recruits a User Y and User Y recruits Z, User Y becomes a Recruiter and S/R X will receive a very small percentage of Z's sales. The business intent of this is so that two people will not argue over who recruited Z since they both benefit.

Due to the "bottom-up" approach of collecting information according to the invention, a direct-sales organization comprising people who can work face-to-face with each other may be built from scratch. Current direct sales organizations fail because the value-added from the recruiting system is minimal and the cost to the consumer is high (there is too much focus on recruiting and not selling product). With a direct sales organization developed in accordance with the system of the invention, only the recruiter who earns, e.g., ten per cent (a

common percentage for referrals on the Web), will not be so high as to provide an overpriced product (service) for the consumer (advertiser). Further, a client may always fire a sponsor and allocate those funds toward another sponsor or other co-op marketing arrangements.

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As an example, a flea market operator has a weekend flea market that has about 100 vendors. The operator convinces 50 vendors to join the System and automatically becomes both the Sponsor and Recruiter for each of these 50 vendors. According to the invention, the operator receives a commission from the System based on being both a Sponsor and Recruiter. As a Sponsor, he/she may provide additional services to these 50 vendors. Any of these 50 people could decide to drop the flea market operator as a Sponsor, yet the operator will function in the capacity of a Recruiter having brought in these Users, and earn a smaller commission. Anyone who drops their Sponsor may hire another Sponsor or place those fees into other joint marketing arrangements with the Company, such as cooperative advertisements in the local paper, or even placing the Company name on their business card.

The system 10 of the invention further enables Users to search out the occurrence of events or gatherings pertaining to User's interests within a specified radius. Preferably, User's may subscribe to receive automatic notifications, e.g., via e-mail, about events pertaining to User's interests (e.g., music concerts, poetry readings, art exhibits, and the like) within a specified distance and/or specified times, or may initiate a search any time via their web browser. Figure 7 illustrates such a system 400. As shown, in real-time, one or more Event organizers provides respective information feeds into the system that each specifies a date/time and address location where an event is occurring (step 403). The system then calculates a latitude/longitude associated with the event address location and stores this event information in an events/news database 18d. Particularly, a database table Events\_table 18d, includes fields having a description of the event and event latitude and longitude data, or other

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designation that allows the system to determine the event's approximate latitude and longitude. In real time, as depicted in Figure 7, the system will determine if a subscriber has selected an event search option (step 410) and particularly, whether an automatic event notification option has been specified (step 415). If no automatic option has been specified, then the system will wait to receive a User's event search request entered through their web browser (step 420). When such an event keyword search indication from a user is received, the system receives the user specified date and/or time and/or radius (e.g., distance in miles) for events that they are interested in (i.e., 1/5/00 2pm 10 miles) (step 425) and performs the search (step 450). As part of the search process, the System calculates the distance between the User's location and the address of the event locations in the manner as described herein, compares the User specified radius, and searches for events within the given radius that match the selected dates (or range of dates/times) and/or the keywords entered. Alternately, if at step 415, a user automatic event notification option is subscribed, the search step 450 is performed automatically. Once the search is performed, the search results will either be displayed for the User (steps 455, 470) with an ability for the user to view the results in more detail, or, the system automatically sends the user an e-mail when new events come up that meet their criteria (step 465). If the User has chosen the automatic option, the system will perform the events database search for the desired criteria automatically at a specified frequency (e.g., weekly) and automatically e-mail them the results of the search. The same principle may apply from other information feeds, e.g., news feeds which may be provided from a variety of well-known sources via electronic means - most likely Internet.

Figure 8 illustrates an example web page display depicting the ability of the system to perform a search for a user based on both distance and time. As shown in Figure 8, a web page screen 500 downloaded to the user to enable a user to receive a notification of an event, for example, a garage sale, at a specific data/time and distance. Event information entered by the event organizer would be stored in an Events\_GarageSale table 673 in the database of (Figure 6) and



include such variables as: the 'Itemid', variable which is an Item ID (even though events are not really items); the 'prid', i.e., which is the Product ID (and is used for events even though it is not really a "product"); a 'seqnumber' variable representing a sequencing number used in case more than one record is needed for an event. For example, if the event occurs over multiple days; a 'price' variable indicating the price of the event if any; a 'title' representing the title of the ad (used for keyword search, which may be further indexed); a 'start' variable representing the starting date/time (multiple records for single event if it occurs over multiple periods of time); an 'ending' variable indicating the ending date/time of the event; a 'picturefile' variable indicating the name of the picture file that is stored on the System server; a 'picturefileclient' variable indicating the name of the picture file that the client used (in case they want to edit/change their picture); a 'fulldescription' variable representing an entry field for any comments the user may want to add.

As shown in Figure 6, the database is preferably organized as a series of tables including: an Adblocks\_table 605 including variables for tracking blocks of Advertisements that users have purchased; an Address\_table 610 including variables for tracking User Addresses with the possibility that a user may have multiple addresses; an AdRatesLine\_table 613 for storing and maintaining the current rate table for users advertisements, with the price of the ad determined by an advertisement duration, e.g., for 31 days, 91 days or 366 days, and the 'prid' (product id of the product a user is selling); an Attribute\_types table 615; an Auction table 620 including variables that define the current parameters of the auction; an AuStatusCode\_table 622 including variables indicating the current status of the auction; an AuTypeCode\_table 625 including variables indicating the type of auction, e.g., bid up, bid down, etc., a Bid table 628 including variables specifying the terms of each bid submitted; a Category table 630 including variables for indicating the categories of all available products available for purchase through the system; a Clickthru\_table 633 including variables for recording the client who clicked and the item they clicked on; a

Client\_table 635 including variables for storing all of the information about a client; a Client\_Sponsor table 638 including variables for tracking Client Sponsor relationships which may change over time (Such variables include: 'CLID' representing the Client ID; 'SponsorID', representing the Sponsor ID; 'StartDate' representing the start date of this relationship (If they have transferred from another sponsor, then ending date of the previous sponsor is the day before this new sponsor started); a client\_types table 640 including variables for indicating different types of Clients (e.g., retail, individual, broker, business etc.); a holdscreen\_registration table 645 which is a table for temporary storing registration parameters when there is a problem with registration; an Item\_table 648 including variables that describe the particulars of each item such as: itemid'-the Item id (each item (or service) gets its own); 'prid' -the Product ID (i.e., the ID of the product this item falls under); 'clid' -the client id of the seller; 'itshort'-the brief description used to describe the item that is used by the searcher as a keyword search for this item; 'itdesc' -a detailed description of the item; 'itpicfile'-the name of the picture file (if one exists); 'itsellerid'-the client id of the seller; 'itsubmitted'-the date/time submitted to the site; 'itstart'-the start date/time for when the ad starts; 'daystowait' -variable for storing data indicating length of time an item is available for purchase; an 'itdateavail' field indicating a particular date that a particular item will be available; and, 'itstop'-the date/time the ad stops running; an Itemloc\_table 650 including variables for storing the latitude and longitude of the particular item (i.e., associates a latitude/longitude with an 'itemid', 'PRID' product ID and 'CAID' category ID; a Location\_table 653 which is a subset of the Address table\_610; a Phone\_table 655 for storing user phone numbers (each user can have many phone numbers); a phone\_types table 658 including a variable representing different types of phones (e.g., fax); a Product\_table 660 including variables representing products (every product falls under some Category in the category table 630); a Product\_attributes table 663 including variables representing the attributes of each product (e.g., price); a Product\_category table 665 including variables which provide the link for connecting a product table to category table; a Searchstat\_table 680 including

variables representing information regarding every search that every user conducts; a Searchstring\_table 683 including variables representing the actual search string ('ssstring') that every user enters in conducting a search. This additionally includes a 'ssautoemail' flag indicating whether the user wants automatic e-mail; a Sponsor\_table 685 including variables Including the 'CLID' Client ID, 'Services' which are the services the sponsors provide; a 'SponsorDisplay' representing what is displayed on grid results if this sponsor is the sponsor for the seller; and 'CLSponsorLogin' the login id of the sponsor; a Streetloc\_table 693 including a 'slid' field representing the Street Location ID, a 'fromlat' field representing a beginning latitude, a 'Fromlon' field representing a beginning longitude, a 'tolat' field representing an ending lat., a 'tolon' field representing an ending long., and, a 'Milesperdegree' field representing the mileage per one degree of longitude at this latitude (used for interpolation); and, a Srchitems\_table 688 including variables which provide the link for connecting users searches to the items that were found; and, a DueSeller\_table 695 including a 'DSID' flag which is an ID for each entry in the table; the 'ItemID' variable, i.e., the id of the item/service that was sold (if applicable); a 'DSAmount' field representing the amount (in dollars) of this transaction (for example, if a seller puts up one ad, then it will be the cost of that particular ad (a negative amount) and if they paid a subscription fee, then the Dsamount would be credited; a 'DSDateTime' field indicating the date/ time stamp of the transaction; the 'CLID' (the client id of the particular User); a 'DSCurrentTotal' which is a field indicating the running total of that User's current balance so that it will always contain what is due or owed to system for reports; and, a 'DSTransactionType' field which indicates the various types of transactions (e.g., 1 = place an ad, 2=pay for subscription etc.).

A user registers on the system by completing a registration form 700 such as shown in Figure 9. As shown the registration form includes standard use identifier information, e.g., name, location address, password and login id, e-mail address, company name, fax and phone numbers, etc. Most notably, the

registration form includes field 702 for enabling "blind" finds (i.e., a mechanism for preventing the seller's information from being disclosed or displayed to other users in search results) and, a field 704 for indicating dates/times (e.g., hours) that a particular seller's items may be available for purchase. The reason for enabling blind find in the current system (via designation in the field 702 of the User registration form) is that users (a seller address whose location is his home) may not want their neighbors to know personal information about themselves, or possibly expensive items they have in their house. Thus, for most people, field 702 permits the standard method of "checking off" from a list of possible descriptors what they are willing to reveal. For example, a user can check off email address and name and then those two items will be shown to anyone who is interested in buying an item from them. Of course, they can add more information, such as address if they choose. In some cases, where the seller wants complete privacy, and/or in a business to business case, the seller must ensure the buyer is truly the right type of business to buy the item (and reveal wholesale pricing) a "blind find" is desirable. In this mechanism, according to the invention, instead of a buyer's search result normally returning the email address of the person selling the item, instead, the seller is sent an email from the System that includes the buyer's (more generally the "searchers") email (and/or other pertinent information), and they can choose to send the Searcher an email or choose not to engage in a dialog. In this case, the Searcher must be willing to reveal their email to the Seller. In the case where both the Buyer and Seller wish to remain anonymous the System will generate random, temporary identification numbers so that they may continue their dialog and yet not be aware of who the other person is. For example, Seller S, wishes to Sell an item and Buyer B wishes to buy items. In the case where neither wants to reveal their identity. Seller S uses a previously randomly generated email address such as RND8494@planetzozo.com which forwards to their normal System email, such as Seller@planetzozo.com and the Buyer will also use a previously created randomly generated email address as their System Email such as RND74849@planetzozo.com . These emails are always forwarded to a

“randomizer” (not shown) that will strip the headers off of the emails (so users will not know their source) and assign a random id to the email, such as RND10495790@planetzozo.com and then forward it onto the recipient.

Depending upon the security required for each side, the randomly generated e-mails can be re-randomized after each interaction between the two parties, or there could simply be a random email generated for each item sold in the case of a seller, and for each series of interactions with a Seller, in the case of a Buyer. Each time an email is sent the same random email is used for the next immediate correspondence to respond.

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As a result of completing and submitting the User\_registration table 700, a client record is created for storage in a Client\_table 635 such as shown in Figure 6.

The Client\_ table 635 shown in Figure 6 is updated with all current user information and includes fields such as: ‘clid’ -theClient ID; ‘cltype’- the type of client; ‘ssseqno’ -the Sequence Number; ‘clserial’-the Serial Number; ‘lastname’ -the lastname of the client; ‘firstname’- the client’s firstname; ‘middlename’ -the client’s middlename; ‘email’ -the client’s e-mail; ‘clcompany’ -the company the client belongs to; ‘cluserlogin’ - the user login for the client they create; ‘clpasslogin’ -the user password for client; ‘clregistrationdate’ -the registration date/time they signed up; ‘cluseemail’ -the email; ‘clsponsorlogin’ -the client’s sponsor’s client ID; ‘clrecruiterlogin’-the client’s recruiter’s login; ‘autoemailqty’ -a flag indicating whether the client is willing to accept auto-emails for items they are interested in; ‘autoemailperiod’ - field having a value specifying the quantity of the time period (e.g., 60 days) that the client is willing to accept auto-emails for items they are interested in; ‘cmemail’ - a flag indicating whether the client wants to reveal their email when they sell items; -‘cmname’ - a flag indicating whether the client wants to reveal; ‘cmaddress’ - a flag indicating whether the client wants to reveal their address; ‘cmphone’ - a flag indicating whether the client wants to reveal their phone; ‘cmfax’ - a flag indicating whether the client wants to reveal their fax; ‘cmdirections’ - a flag indicating whether the client wants to reveal directions to their home or place of business;

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'directions' -a field for entering directions to their location; and 'lastadid' -the last address id, since a client is allowed multiple addresses for each individual (the system always assumes they want to start with the same address they last used). Referring back to Figure 6, if the user does not fill in a required field then their information is put into a holdscreen\_registration table 645. Once the user has filled in a completed registration form, the system then searches for their address in the Streetloc table 693 and determines if it is an existing address in the current database. If it is an existing address then the latitude and longitude are already contained in the Streetloc table and based on the address, an interpolation may be performed for calculating the approximate latitude/longitude and the adding the appropriate latitude/longitude to the user's record. If it is not contained in the database, then the system will "downgrade" by finding a street name match and placing the user somewhere on their street. If this does not work, then the system will use their city/state combination to give them a lat./long. it is understood that, with each "downgrade" their lat./long becomes more imprecise. Since this is their first address put into the system, they will have a new record put in the address table, which will store this first address and the latitude/longitude.

When a user decides to sell an item using the system, i.e., placing an ad, and the user has not yet registered on the system, then they are prompted to register first in the manner described herein, before they may enter items for sale. The user starts at the home page 50 (Figure 1(b)), and chooses the "Submit Ads" link 67 at the top of the screen. They are then brought to a screen that prompts the User to select a Category 55, 85 of the item that they wish to sell. Then, they are prompted to enter the specific type of product they are selling (e.g., a car). For the case of "Selling a Car", a web-page screen 800 may be presented, such as shown in Figure 10(a), prompting the user to enter the details 802 of the car they are selling (i.e. Make, Model, Year). Each of the items that can be sold at the site has its own web-based screen where the user enters this information. The information the seller enters is immediately stored in an appropriate database

table (Figure (6)) that correspond to their product, (e.g., automobile, furniture, apartments for rent, etc.). Thus, for example, the item Cars will have its own table Vehicle\_Cars table 670 to store the appropriate fields for the search engine which would include entries such as 'prid', 'price', 'title', 'year', 'forsaleby',  
5 'picturefile', and 'fulldescription' etc. Alternately, all these tables may be combined into one larger table.

A user who decides to search for an item that is for sale starts at the home page (Figure 1(b)) and generally, has two options for searching: a detailed and  
10 "general" search. The "general" search appears at the top of most pages of the site. The general search allows a user to type in keywords that they are searching for (e.g., 1999 Ford Escort) and specify a mileage they are interested in searching. The system will then return all records (on a page by page basis) that have the selected search criteria and also are within the distance (e.g., point to  
15 point mileage) range specified by the user. In the more detailed search, a search screen 850 will be displayed such as shown in Figure 10(b) which is very similar to the screen used by the seller. The searcher may specify in detail the item they are looking for and the system will find matches based on the fields being entered. For example there are fields for Year, Mileage etc. If the entry is too  
20 specific, they may not get any matches at all (e.g., there aren't that many 99 Ford Escorts within a 10 mile radius of any given house). However, the user is offered the option to have an e-mail sent to them when new items appear that match their criteria. Particularly, the system periodically runs everyone's requested query once per night, and will e-mail them the results in the evening. Now a user is  
25 getting email notices about only items they are interested in (because they have specified in detail what they are looking for). When they choose either the detailed search or the general search they are then presented with a grid of items from which to choose. Once they choose a specific item they are interested in, they are brought to another screen where the details of the item are shown. In the  
30 case of an auction, the user does the exact same search for an item, and they are presented with a choice of items on the same display grid on which to bid. Once

the user chooses a particular item, they are presented with the detail screen that shows all the particulars of the item and the current auction status including current high bid (or low bid if auction is bidding down) and auction duration (when the auction is ending), etc.

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In the preferred embodiment, the system 10 includes an option for enabling a seller to specify a specific date that an item will be available for purchase or shipping (that are not currently available), and, an option enabling a buyer to specify when a particular item is needed. For example, a further variable may be entered by a seller to indicate when a particular item to be sold may be available and/or the number of days as to how long it will take the item to be ordered. Figure 11 shows such a user screen 900, for the example of a home furniture sale, providing a drop down selection 902 indicating the date or time interval of a particular item's availability (e.g., maple living room set). The item variable 'itdateavail' in Figure 6 will store such a value. A corresponding user search screen (not shown) for the buyer will provide a like drop down menu for indicating a desired delivery date or date of an item's availability for pick-up.

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Users may purchase ads on a subscription basis or an individual basis. The rates vary based on the product to be sold. The AdRatesLine\_table 613 stores the data for what the current rates are for the product the User is selling. On a daily (or more frequent) basis, the system checks which people have money in their account to enable them to put up ads or ads that have expired. Preferably, the system performs checks more frequently (e.g., every 5 minutes to get expiring ads and those that really don't have any money in their account).

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As mentioned herein, when a user chooses a sponsor then that sponsor earns a commission based on the amount of money their client pays to the System. The sponsor is always paid in arrears, and if the client pays a yearly subscription then they sponsor gets paid quarterly. Every month the system calculates how much is due each sponsor by searching the Client\_Sponsor table 638 to determine who is

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the user's current sponsor. Then the system searches for specific payments that have been made and multiplies this by their commission percentage (e.g., 25%) for sponsors. In the case of recruiters (a person is initially both a client and a sponsor for a recruiter), it is the same, except recruiters currently earn 10%. (so a total of 35% if they are both a recruiter and a sponsor). When the user specifies a date/time as a search criteria, (e.g., they are interested in garage sale 'events' happening over a specific weekend), then the system searches for all events that occur within their specified range of date/times. The system particularly stores multiple records for each event with each record corresponding to one block of time. Thus, if an event occurs over three days from 10am to 5pm then there will be three entries in the table (e.g., Event\_Garagesales). When a user does a search they can find any one of these event records as a match.

For shippers to bid or request certain jobs, a similar system is implemented. In other words, the Services\_shipping table stores information about shippers that are offering their services for sale, similar to any of the other services screens and tables. Like many of the other services or products, they do have fields that are unique to their service. A user who wishes to have shipping done, can search for a shipper that provides the services they desire or they can set to email all the shippers who could possibly offer their services or just have their "shipping job" automatically posted at the site so that shippers can review jobs that interest them. In similar fashion to other service providers the shippers can provide information about the distance they are willing to work. Additionally the shipper can specify the length of distance they are willing to travel for a given job (e.g., point to point distance in miles or actual road milage) and the system, since it knows the distance between the two points, can find shippers who work in the given area and can do the job. Then the job can be offered for bids, or just given to one of the shippers by the person who requires the shipping. This allows seamless integration of local shippers, and is especially useful for shipping smaller items, such as drug store deliveries, that are currently fragmented. It

allows for companies to form who could provide just local deliveries for local stores and have multiple stores as clients. The system will provide them with a steady stream of business.

5 It should be understood that the system of the invention additionally changes the dynamic of how much work is done by the respective buying and selling parties. For example, in the preferred embodiment, the system is employed with an electronic billing/payment system that accepts credit cards, for instance. Thus, in the context of local grocery market, a buyer may be able to purchase items, and  
10 the seller may be able to package up a group of items for the buyer in advance of a buyer's pick up. This is more efficient for the buyer who now only has to pick-up the items, with the seller doing the "packing" during off-peak times, for example. This provides a more efficient system than is currently in place for local merchants as this type of interaction is facilitated by the distance search.  
15 With the credit card or other electronic payment means, the system functions as a trusted intermediary with the ability to release funds upon receipt of goods in acceptable condition. Further, given the localness of the system, employees of the System could actually inspect the goods themselves in some cases, prior or after shipment. This system can be arranged to charge the sellers merchant  
20 account should they have one, or charge the system's credit card. This saves both the buyers and sellers time, and changes the role of clerks at the store, e.g., from a function of "finding things" for clients who come into the store, to packaging up packages for those that come to pick up items, or those that want delivery. It moves the retail store one step closer to becoming just a stopping  
25 point for goods, as opposed to a place where users browse and shop as shopping and browsing is now conducted on line.

Furthermore, a widely distributed distribution system allows integration of manufacturers more directly with consumers, however with the "local" merchant  
30 in the middle of the transaction, providing services such as trust (and the ability

to order an item, allow the ultimate consumer to "touch it" and see it first hand, without the obligation of purchasing the item) which, as before, saves both the buyers and sellers time. The system also facilitates orders that can be placed in advance of the seller actually having the item in stock. For example, in the case of a bakery, a user can now place their orders on-line to be picked up at specific times, and have their order waiting. The baker now has more of an idea what customers want and will produce more efficiently. For the case of a retail establishment, the system provides guidance as to what inventory to maintain thus creating efficiencies. The distinction between this and other e-commerce is that the system allows these functions to be performed for local merchants, whereas formerly there was no efficient means for local businesses to communicate and provide e-commerce for the appropriately targeted audience.

While the invention has been particularly shown and described with respect to illustrative and preformed embodiments thereof, it will be understood by those skilled in the art that the foregoing and other changes in form and details may be made therein without departing from the spirit and scope of the invention which should be limited only by the scope of the appended claims.

**WHAT IS CLAIMED IS:**

1. A method for facilitating the establishment of relationships between sellers of items including goods, services and information, and buyers of said items in a desired geographic area via the Internet, said method comprising:
  - a) enabling entry of seller registration information via a Web browser interface, said seller registration information including identification information including information pertaining to items offered for sale and an address location indicator associated with said object for sale;
  - b) generating database records for storage in a database, said records including for associating items with said Seller information including said address location indicator and purchase price information pertaining to an item offered for sale;
  - c) enabling entry of buyer information via a Web browser interface, said buyer information including criteria such as an item description, a desired geographical distance radius within which an item exchange or purchase is to be transacted, and, a desired time period within which an item exchange or purchase is to be transacted;
  - d) performing a database search for potential items indicated by said buyer and calculating an distance between location of said potential item and an address location of said buyer desiring said item;
  - e) comparing said calculated distance with said distance radius indicated by said buyer; and
  - f) generating for display at said buyer Web browser interface those items and purchase price information found which do not exceed said distance radius, wherein a purchase, sale, or exchange of said goods, services or information may be transacted between buyers and sellers within a desired geographical area.

1        2.        The method as claimed in Claim 1, wherein said relationships between  
2        sellers of items and buyers of said items in a desired geographic area are  
3        established in accordance with an on-line business setting comprising one  
4        selected from: a system for conducting on-line auctions and, an on-line classified  
5        advertisement service.

1        3.        The method as claimed in Claim 2, further including the step of  
2        maintaining a database of geographic latitude and longitude values corresponding  
3        to said address locations of items entered by seller, said calculating step including  
4        invoking a geographic coding algorithm.

1        4.        The method as claimed in Claim 1, further including the steps of:  
2        initiating electronic payment of an item purchase, in advance of delivery or pick-  
3        up of said item purchased, and notifying said seller of said payment.

1        5.        The method as claimed in Claim 3, wherein said buyer information  
2        includes a specified area.

1        6.        The method as claimed in Claim 2, wherein after step f), the step of:  
2        enabling a buyer to immediately initiate on-line payment of a desired item, said  
3        on-line payment effected by means including one of: credit card and electronic  
4        check.

1        7.        The method as claimed in Claim 2, wherein said seller registration  
2        information includes a desired geographical distance radius within which a seller  
3        desires to sell an item or pay for transportation services for delivering an item to  
4        be purchased by a buyer, said comparing step further including the step of  
5        comparing said calculated distance with said distance radius entered by said  
6        seller.

1        8.        The method as claimed in Claim 2, further including the step of  
2        maintaining shipping database table comprising users capable of providing  
3        transportation services for transporting items between buyer and seller locations  
4        and costs associated with said transportation services, said method further  
5        including the steps of :

6                searching said database for ascertaining various locations of items  
7        meeting buyer criteria at one or more distances; and,

8                searching said shipping database for ascertaining potential transportation  
9        costs associated with a potential item purchase for items at each said various  
10       calculated distance; and,

11               determining a cheapest cost item given associations of distances and  
12       transportation costs and, displaying for said buyer via a web browser said  
13       determined cheapest cost item.

1        9.        The method as claimed in Claim 2, wherein a seller retains services of a  
2        sponsor to assist in participating in said system, said method further including the  
3        step of maintaining a database table of said sponsors and associated sponsor  
4        information, said sponsor information including a list of services a sponsor may  
5        provide for a seller of items, a sponsor address location, and a desired geographic  
6        distance radius a sponsor is willing to travel to provide a service for a seller.

1        10.       The method as claimed in Claim 9, further including the step of enabling  
2        a seller to initiate a search of said sponsor service list for a sponsor capable of  
3        providing a service for said seller within a desired geographic area, said step  
4        including:

5                performing a database search for potential sponsors based on a desired  
6        service indicated by said seller and calculating a distance between an address  
7        location of said sponsor and an address location of said seller;

1 comparing said calculated distance with said distance radius indicated by  
2 said sponsor; and

3 generating for display at said seller Web browser interface those sponsors  
4 found which do not exceed said distance radius, whereby said sponsorship  
5 services may be provided to facilitate a seller's participation in an auction or  
6 classified advertisement system within said desired geographical distance radius.

1 11. The method as claimed in Claim 10, wherein said system compensates a  
2 sponsor for facilitating entry of sellers in a system: said method further including  
3 the steps of:

4 linking those sellers registered in said database and participating in said  
5 system with a particular sponsor that facilitated that seller's entry; and,

6 tracking compensation for a sponsors in said sponsor database registry as  
7 long as a seller is linked with a sponsor and continues to receive sponsor's  
8 services.

1 12. The method as claimed in Claim 2, wherein a user facilitates participation  
2 and entry of potential buyers in said system; said user characterized as a recruiter,  
3 said method further including the step of:

4 linking those buyer's registered in said database and participating in said  
5 system with a particular recruiter that facilitated that buyer's participation; and,

6 automatically compensating a recruiter for facilitating entry of said  
7 buyers in said system, said compensation amounting to a percentage of fees  
8 earned by said system due to transactions performed by said buyer.

1 13. System for facilitating the establishment of business relationships  
2 between sellers and buyers of items within a desired geographic area via the  
3 world-wide web, said items including products, services and information, said  
4 system comprising:

1 web server for providing web-based communications for receipt by users  
2 via a Web browser interface, a first web-based communication including fields  
3 for enabling entry of seller information including information pertaining to items  
4 offered for sale and an address location associated with said items for sale, and a  
5 second web-based communication including fields for enabling entry of buyer  
6 information

7 including an item description, a desired geographical distance radius within  
8 which an item exchange or purchase is to be transacted, and, a desired time  
9 period within which an item exchange or purchase is to be transacted;

10 a database including records of said items available for purchase through  
11 said system and their associated address locations;

12 a database search engine for locating from said database those potential  
13 items indicated by said buyer; and,

14 a device for calculating a distance value between a location of each  
15 potential item found in said search and an address location of said buyer desiring  
16 said item,

17 and for comparing said calculated distance with said distance radius indicated by  
18 said buyer,

19 wherein said web server downloads for display to said buyer Web  
20 browser interface only those items and purchase price information found which  
21 do not exceed said distance radius, thus facilitating a purchase, sale, or exchange  
22 of said goods, services or information between buyers and sellers within said  
23 desired geographic area.

1 14. The system as claimed in Claim 13, wherein said relationships between  
2 sellers of items and buyers of said items in a desired geographic area are  
3 established in accordance with an on-line business setting comprising one  
4 selected from: a system for conducting on-line auctions and, an on-line classified  
5 advertisement service.



1        15.    The system as claimed in Claim 14, wherein said seller information  
2 includes a desired geographical distance radius within which a seller desires to  
3 sell an item or pay for transportation services for delivering an item to be  
4 purchased by a buyer, said comparing device further comparing said calculated  
5 distance with said distance radius entered by said seller.

1        16.    The system as claimed in Claim 14, further including a database of  
2 entities capable of providing transportation/delivery services for transporting  
3 items between buyer and seller locations and costs associated with said services,  
4 said database search engine further searching said entity database for ascertaining  
5 potential transportation costs associated with a potential item purchase and  
6 delivery, wherein said web server downloads for display to said buyer Web  
7 browser said additional potential transportation costs associated with a purchase  
8 of a particular item to facilitate a buyer's purchasing decision.

1        17.    The system as claimed in Claim 14, wherein a seller retains services of a  
2 sponsor for facilitating a seller's participation in an auction or classified  
3 advertisement system within a desired geographical distance radius, said system  
4 further including: a database of sponsors and associated sponsor information,  
5 said sponsor information including an indication of services a sponsor may  
6 provide for a seller of items, a sponsor address location, and a desired geographic  
7 distance radius a sponsor is willing to travel to provide a service for a seller.

1        18.    The system as claimed in Claim 17, wherein a web based communication  
2 further includes an entry for enabling a seller to initiate a search of said sponsors  
3 database for locating a sponsor capable of providing a service for said seller  
4 within a geographic radius, said database search engine performing a database  
5 search for potential sponsors based on a desired service indicated by said seller,  
6 said web server generating for display at said seller Web browser interface those  
7 sponsors found which do not exceed said distance radius.

1        19.    The system as claimed in Claim 18, further including:

2                a mechanism for linking those sellers registered in said database and  
3 participating in said system with a particular sponsor that facilitated that seller's  
4 entry;

5                a mechanism for compensating a sponsor associated with a seller in a  
6 system and tracking compensation for a sponsor in said sponsor database registry  
7 as long as a seller is linked with a sponsor and continues to receive sponsor's  
8 services.

1        20.    The system as claimed in Claim 17, wherein a user facilitates  
2 participation and entry of new buyer's in said system, said user characterized as  
3 a recruiter, said system further comprising:

4                a mechanism for linking those buyer's registered in said database and  
5 participating in said system with a particular recruiter that facilitated that buyer's  
6 participation; and,

7                said compensating mechanism automatically compensating a recruiter for  
8 facilitating entry of said buyers in said system.

1        21.    The system as claimed in Claim 13, further including means for  
2 facilitating electronic payment of an item purchase, in advance of shipping,  
3 delivery or pick-up of said item purchased, and notifying said seller of said  
4 payment.

1        22.    A computer program device readable by a machine, tangibly embodying a  
2 program of instructions executable by a machine to perform method steps for  
3 facilitating the establishment of relationships between sellers of items including  
4 goods and services and buyers of said items in a desired geographic area via the  
5 Internet, said method comprising:

- 1 a) enabling entry of seller registration information via a Web browser  
2 interface, said seller registration information including identification information  
3 including information pertaining to items offered for sale and an address location  
4 associated with said object for sale;
- 5 b) generating database records for storage in a database, said records  
6 including for associating items with said Seller information including said  
7 address location and purchase price information pertaining to an item offered for  
8 sale;
- 9 c) enabling entry of buyer information via a Web browser interface, said  
10 buyer information including an item description, a desired geographical distance  
11 radius within which an item is to be purchased; and a desired time period within  
12 which an item exchange or purchase is to be transacted;
- 13 d) performing a database search for potential items indicated by said buyer  
14 and calculating an distance between location of said potential item and an address  
15 location of said buyer desiring said item;
- 16 e) comparing said calculated distance with said distance radius indicated by  
17 said buyer; and
- 18 f) generating for display at said buyer Web browser interface those items  
19 and purchase price information found which do not exceed said distance radius,  
20 wherein an exchange of said goods and services may be transacted between  
21 buyers and sellers within said desired geographical distance radius.

1 23. The computer program device readable by a machine as claimed in Claim  
2 22, wherein said relationships between sellers of items and buyers of said items  
3 in a desired geographic area are established in accordance with an on-line  
4 business setting comprising one selected from: a system for conducting on-line  
5 auctions and, an on-line classified advertisement service.

1 24. A method for establishing a direct sales organization in a desired  
2 geographic area via the Internet comprising:

1 via a web browser, generating a user interface for enabling entry of  
2 registration information from a client desiring to sell items in a desired  
3 geographic area, and storing said client registration information in a database,  
4 said items including items including goods, services and information;

5 providing first incentive for clients to seek out services of a sponsor in  
6 said geographic area for assisting said user in participating in the organization,  
7 and facilitating search of a sponsor in a desired geographic area via said web  
8 browser, said database including tables having identifiers for associating a seller  
9 with their corresponding sponsor;

10 providing second incentive for current clients of said system to recruit  
11 potential other client buyers and sellers of items in said geographic area, said  
12 database further including tables having identifiers for associating a buyer of  
13 goods in said organization with a recruiter who brought said user in said system,  
14 each said sponsor and recruiter receiving compensation according to said first  
15 and second incentives; and,

16 periodically tracking purchase and sales activity of clients with respect to  
17 their associated sponsors and recruiters and maintaining account information for  
18 compensating said sponsors and recruiters; and,

19 updating said account information for automatically compensating said  
20 sponsors and recruiters.

1 25. The method for establishing a direct sales organization as claimed in Claim  
2 24, wherein said desired geographic area includes a distance radius between a  
3 location of said seller and an address location of said sponsor, said method  
4 including invoking a geographic coding algorithm for determining said distance  
5 radius.

1 26. The method for establishing a direct sales organization as claimed in Claim  
2 24, wherein said first incentive comprises sponsor receipt of a commission based

1 on revenue associated with client fees paid for advertising items to be sold via  
2 said system.

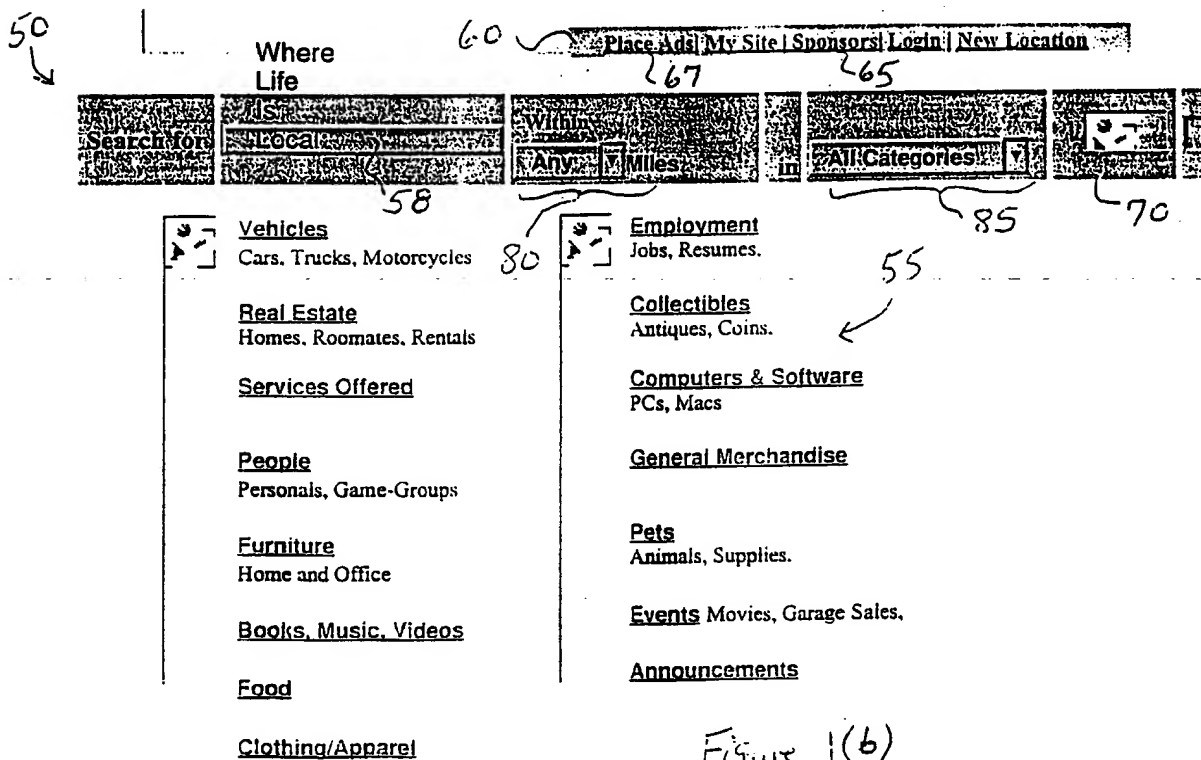
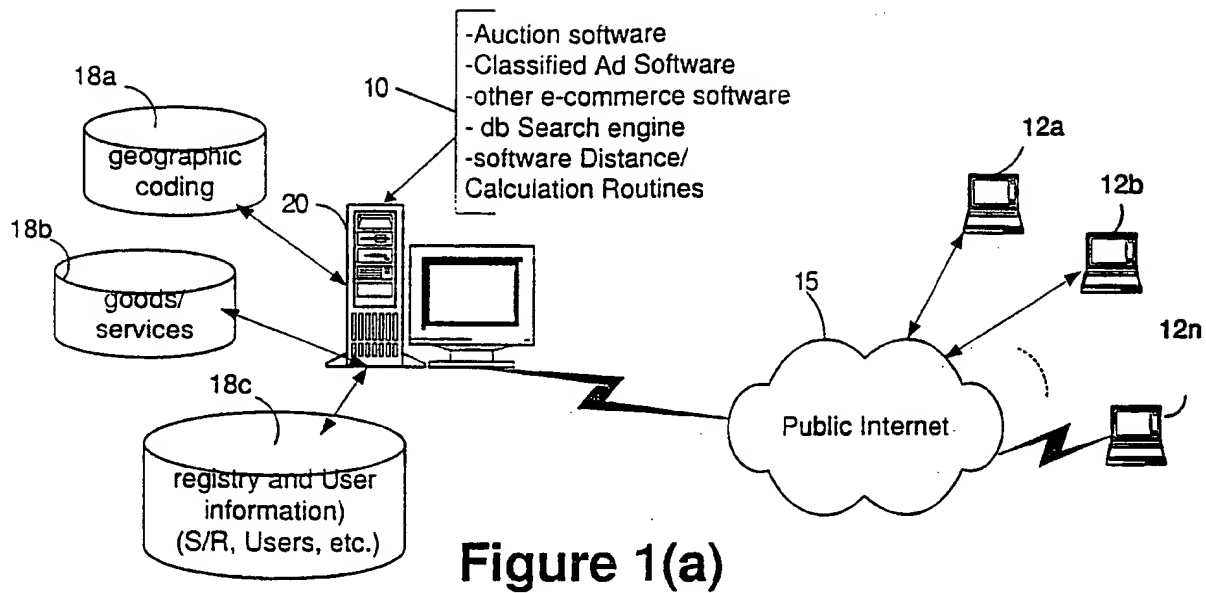
1 27. The method for establishing a direct sales organization as claimed in Claim  
2 24, wherein said first incentive comprises sponsor receipt of a commission based  
3 on revenue associated with client purchases of items sold via said system.

1 28. The method for establishing a direct sales organization as claimed in Claim  
2 24, wherein said second incentive comprises recruiter receipt of a commission  
3 based on revenue associated with client purchases of items sold via said system.

1 29. The method for establishing a direct sales organization as claimed in Claim  
2 24, wherein said second incentive comprises recruiter receipt of a commission  
3 based on client fees paid for advertising items sold via said system.

1 30. The method for establishing a direct sales organization as claimed in  
2 Claim 24, wherein said geographic area is established by either said seller or said  
3 sponsor, said area permitting face-to-face interaction between sponsor and client.

1 31. The method for establishing a direct sales organization as claimed in Claim  
2 25, further including periodically calculating an amount due each sponsor by  
3 searching the first database table and determining the client's current sponsor.



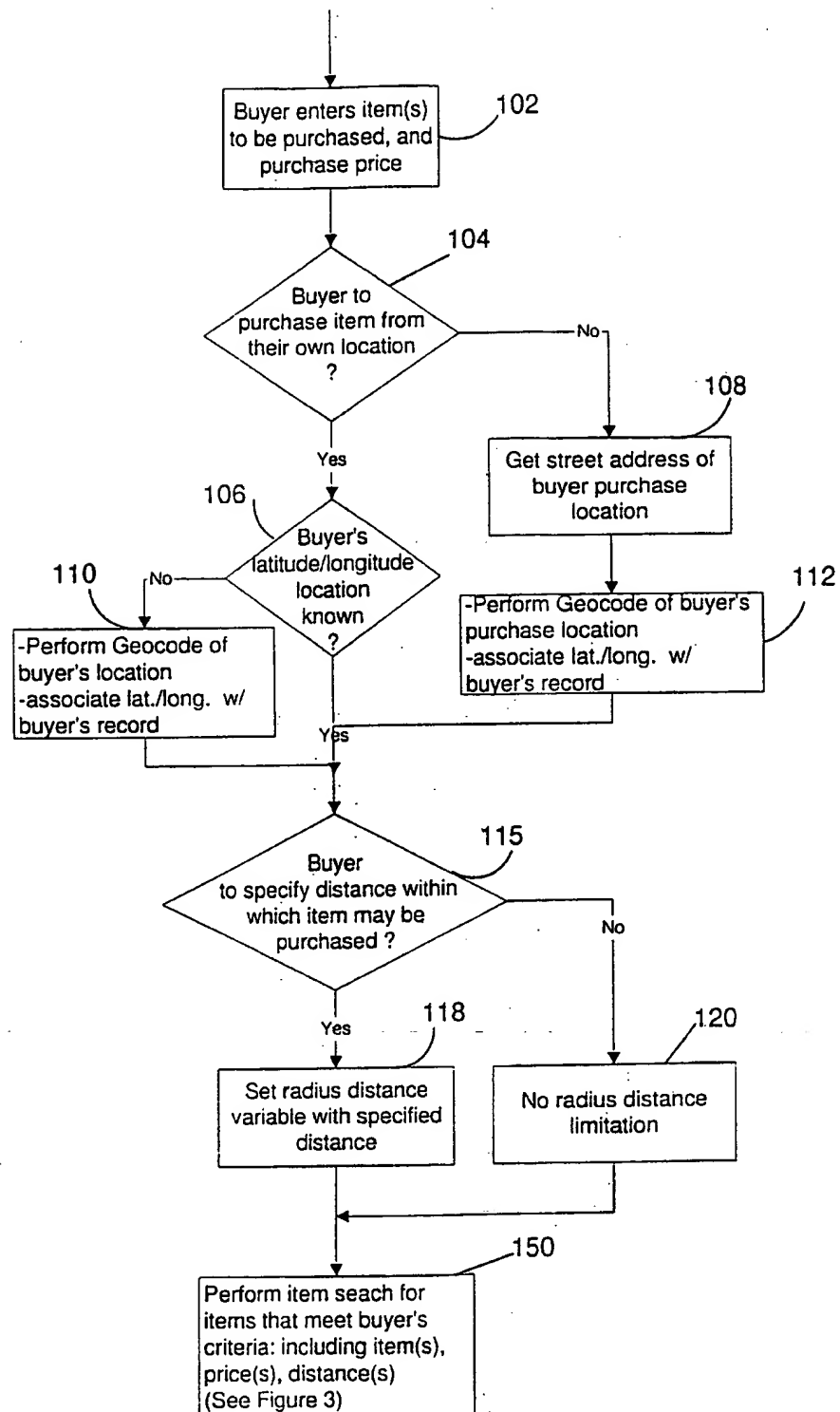


Figure 2(a)

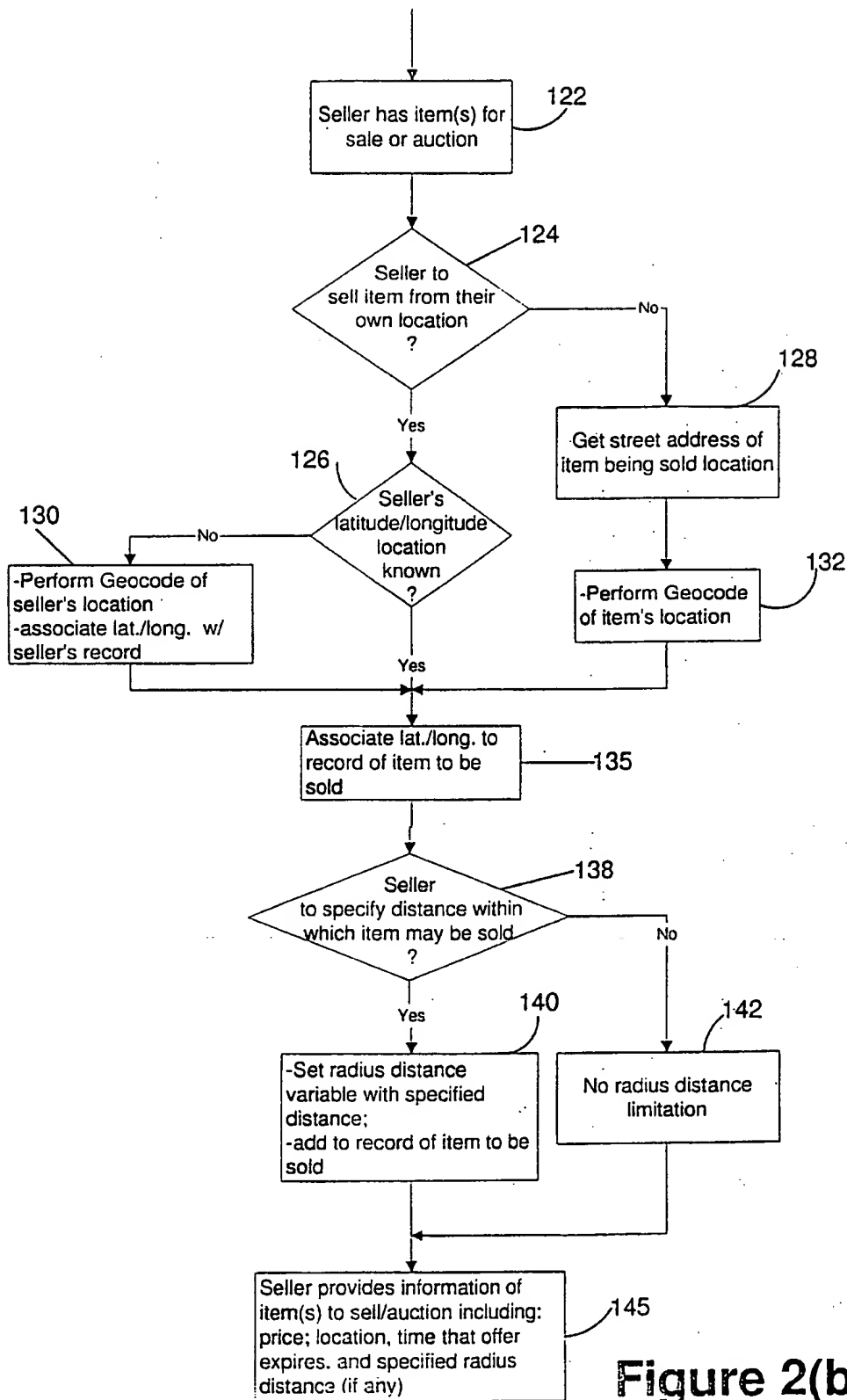


Figure 2(b)



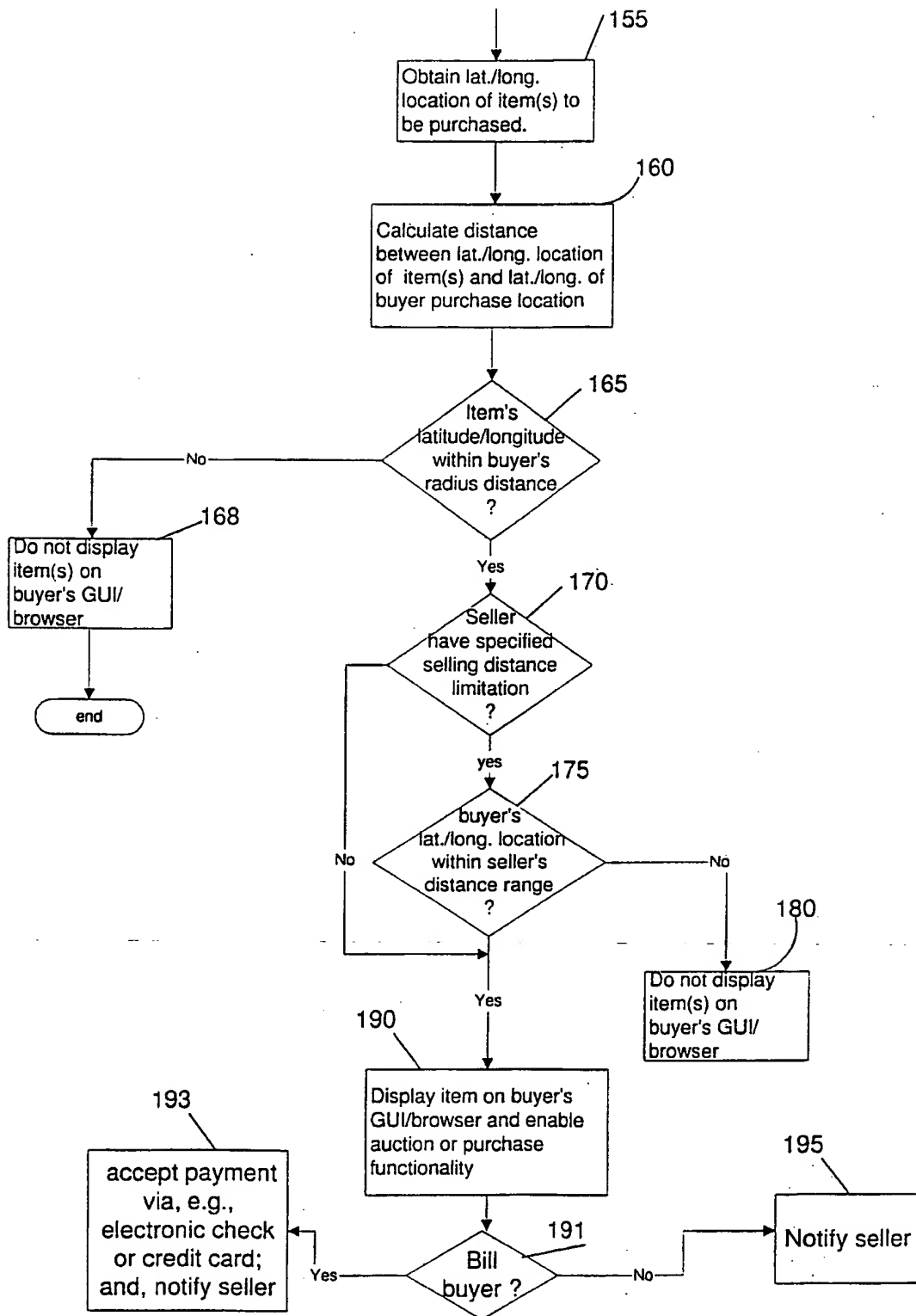


Figure 3(a)

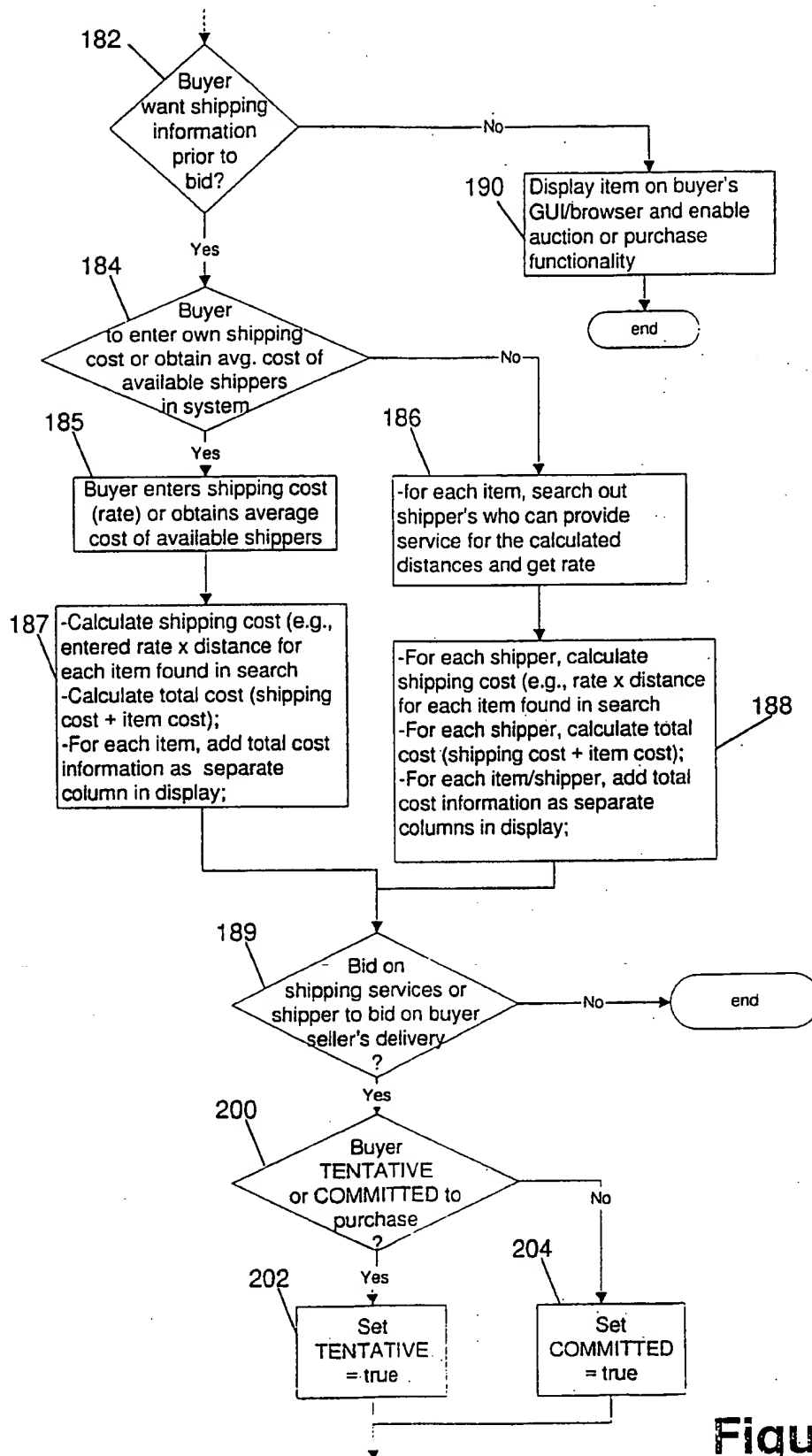


Figure 3(b)

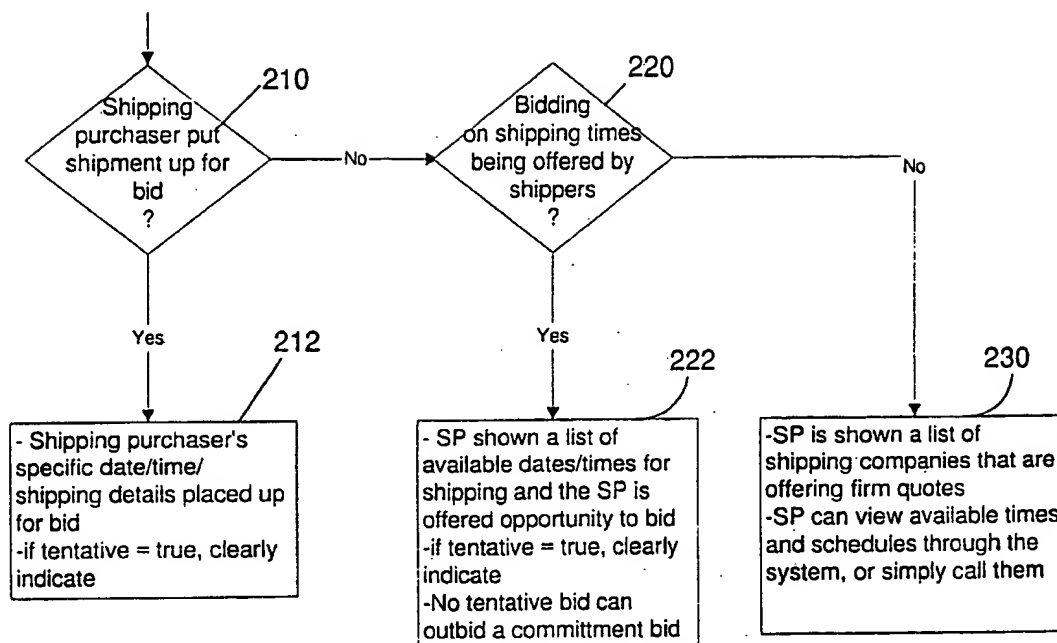


Figure 3(c)

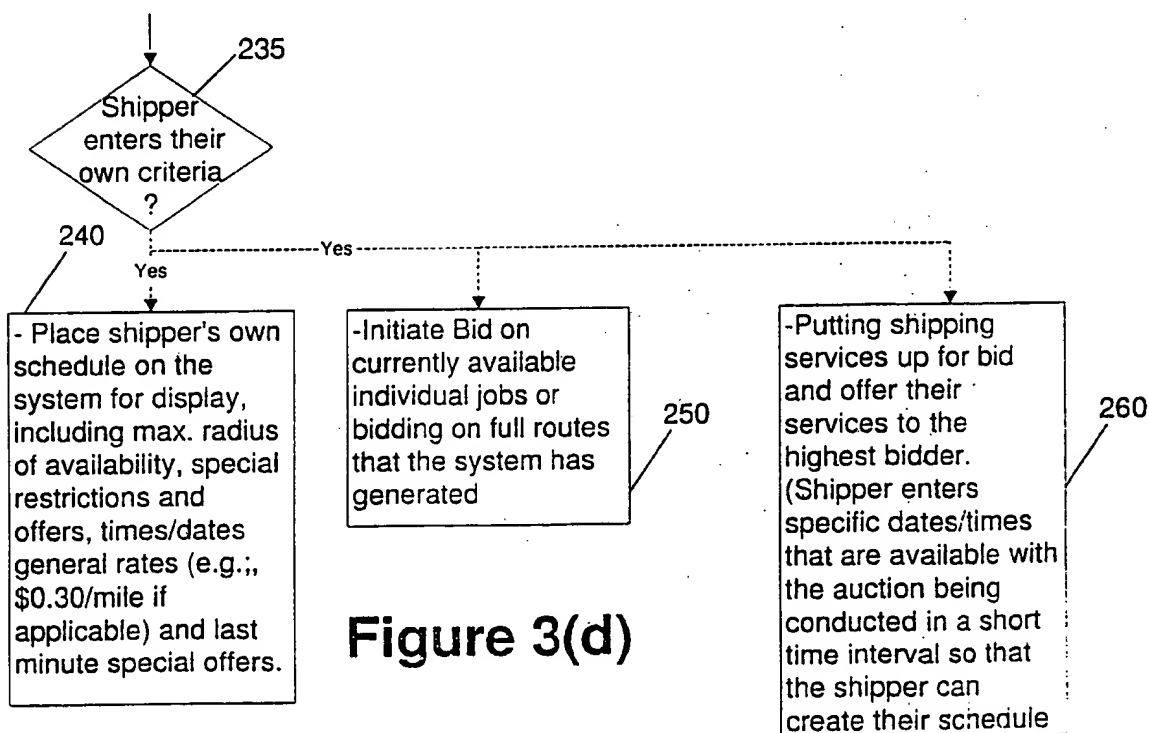


Figure 3(d)

Handwritten annotations: 22, 31b, 24, 26a, 26b, 35, 31a

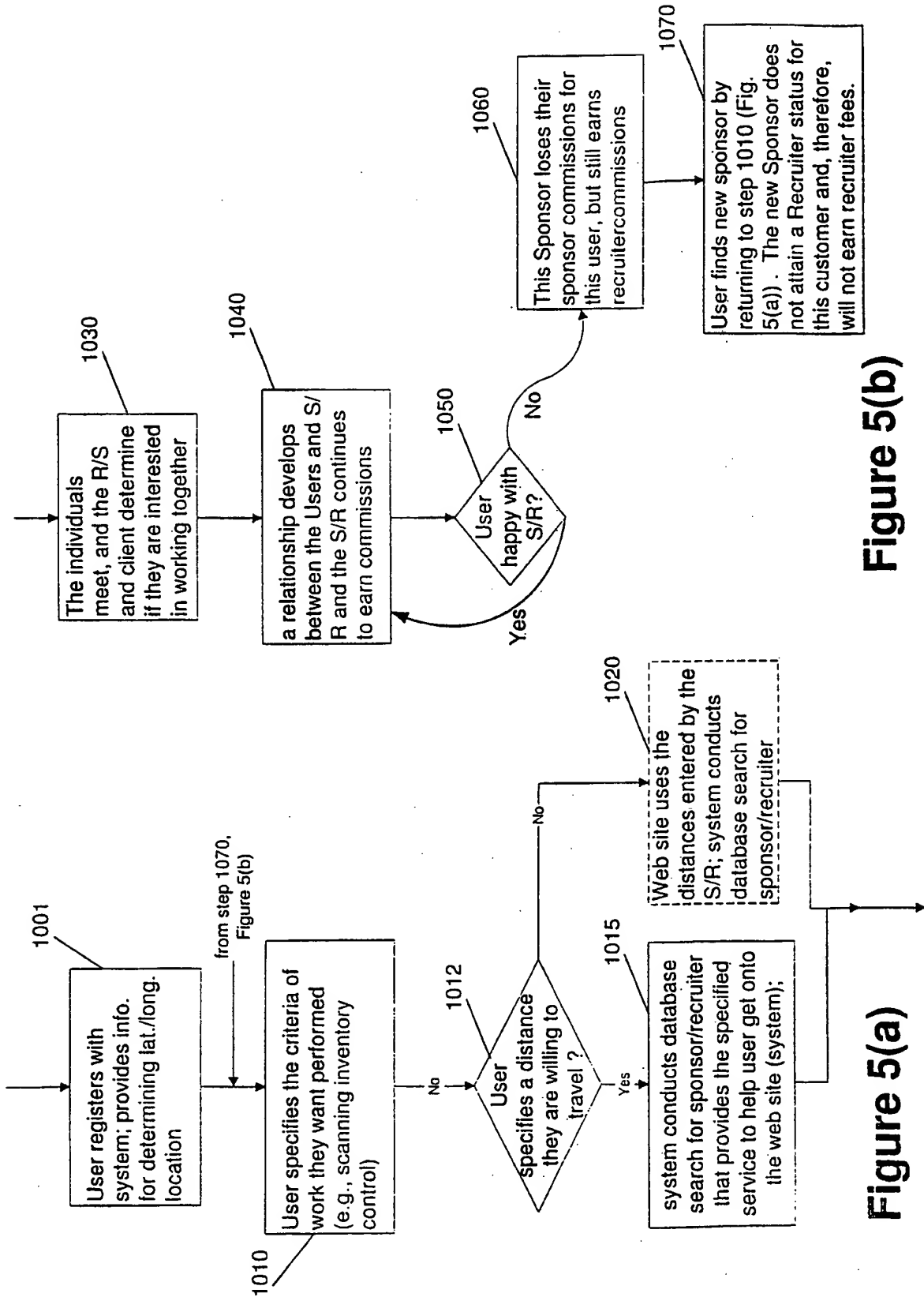
Bicycles: Dirt			Under		
20		28	BMX bike Model 260	1	8
25	1	35	Schwinn K42	1	10

Fig 4a

Handwritten annotations: col, distance, AND/OR, AND, OR, NOT, neg, down

col	distance	AND/OR	distance
$\geq$	<input type="checkbox"/>	AND	$\geq$ <input type="checkbox"/>
$<$	<input type="checkbox"/>	AND	$<$ <input type="checkbox"/>
$\leq$	<input type="checkbox"/>	OR	$\leq$ <input type="checkbox"/>
$\geq$	<input type="checkbox"/>	NOT	$\geq$ <input type="checkbox"/>
$=$	<input type="checkbox"/>		$=$ <input type="checkbox"/>

Fig 4(b)



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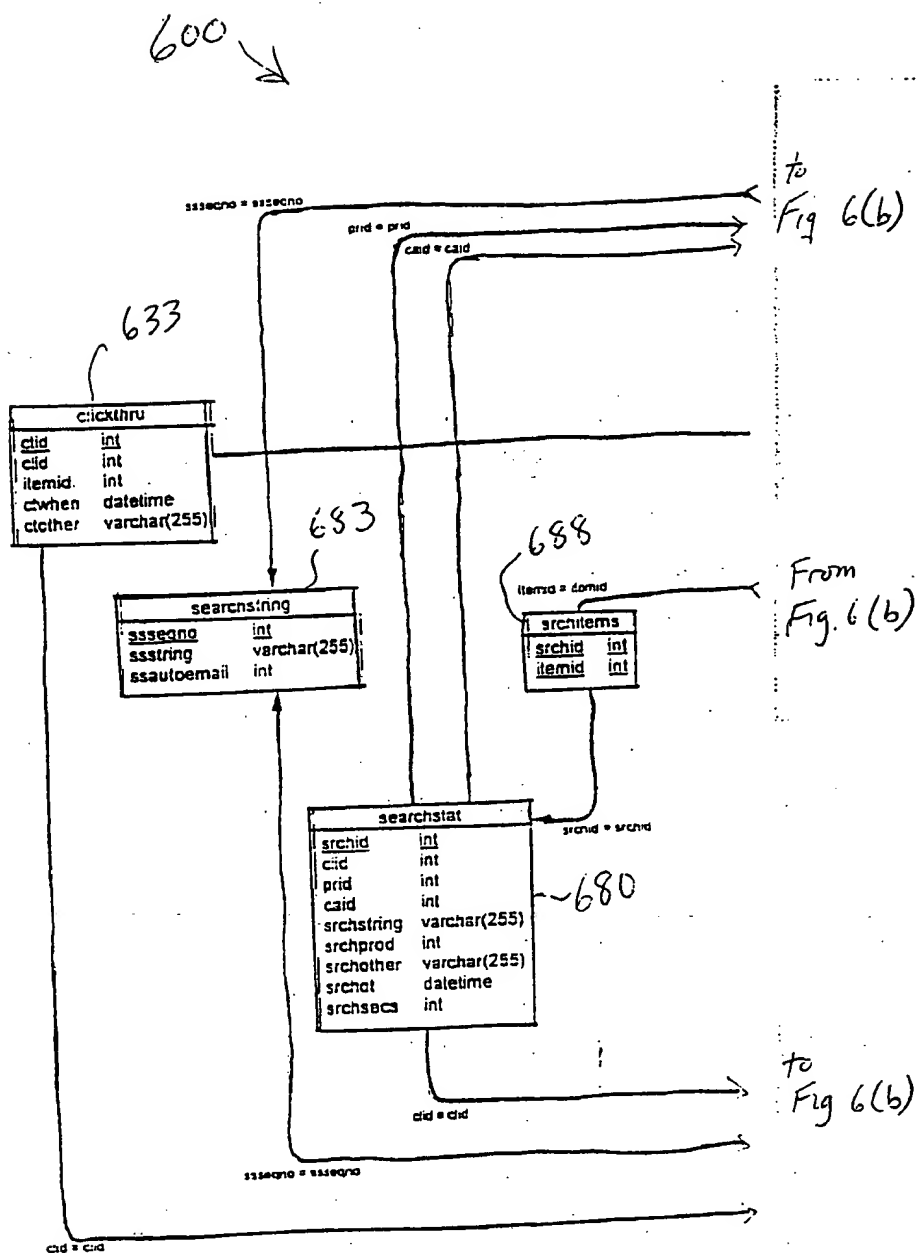
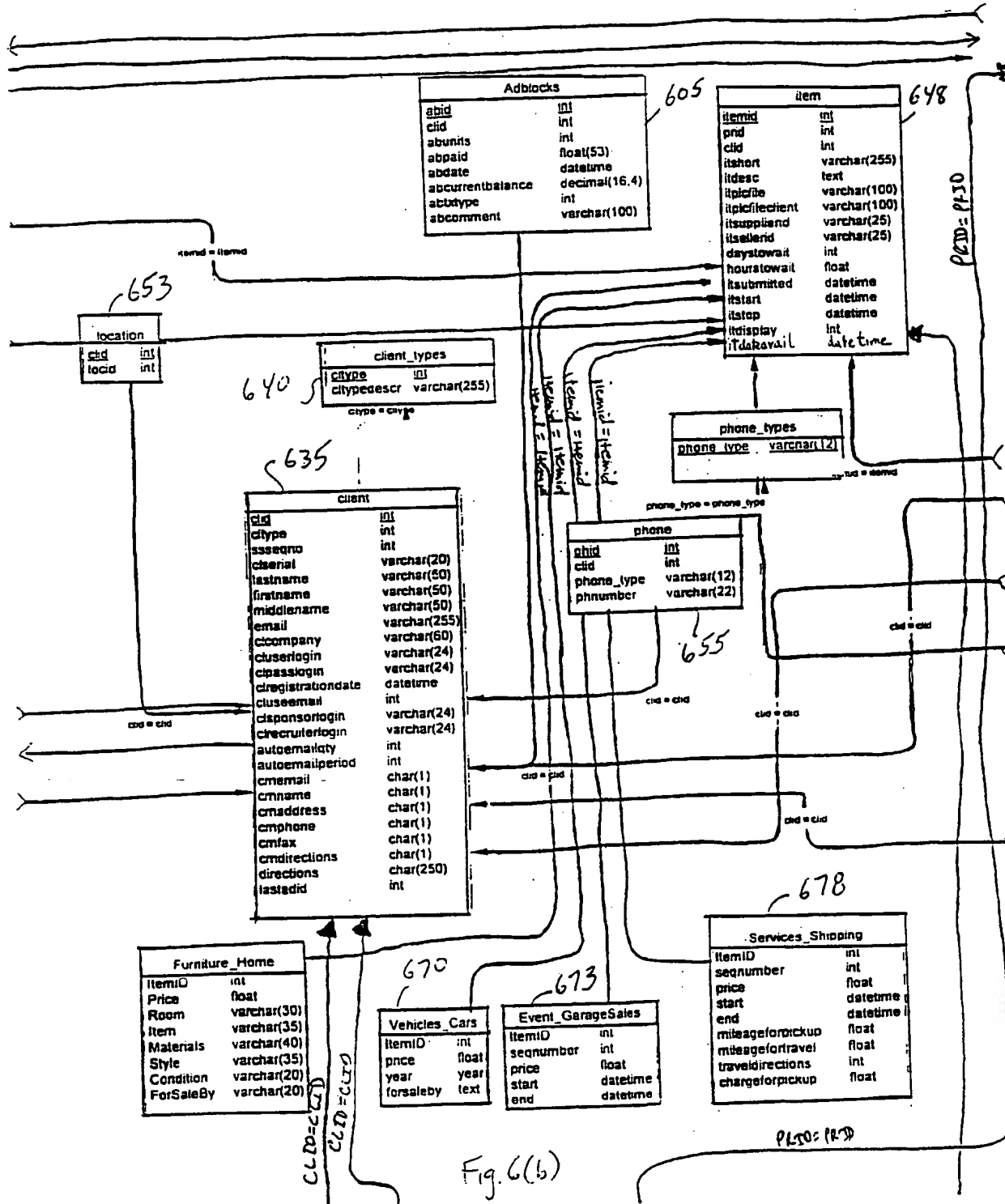
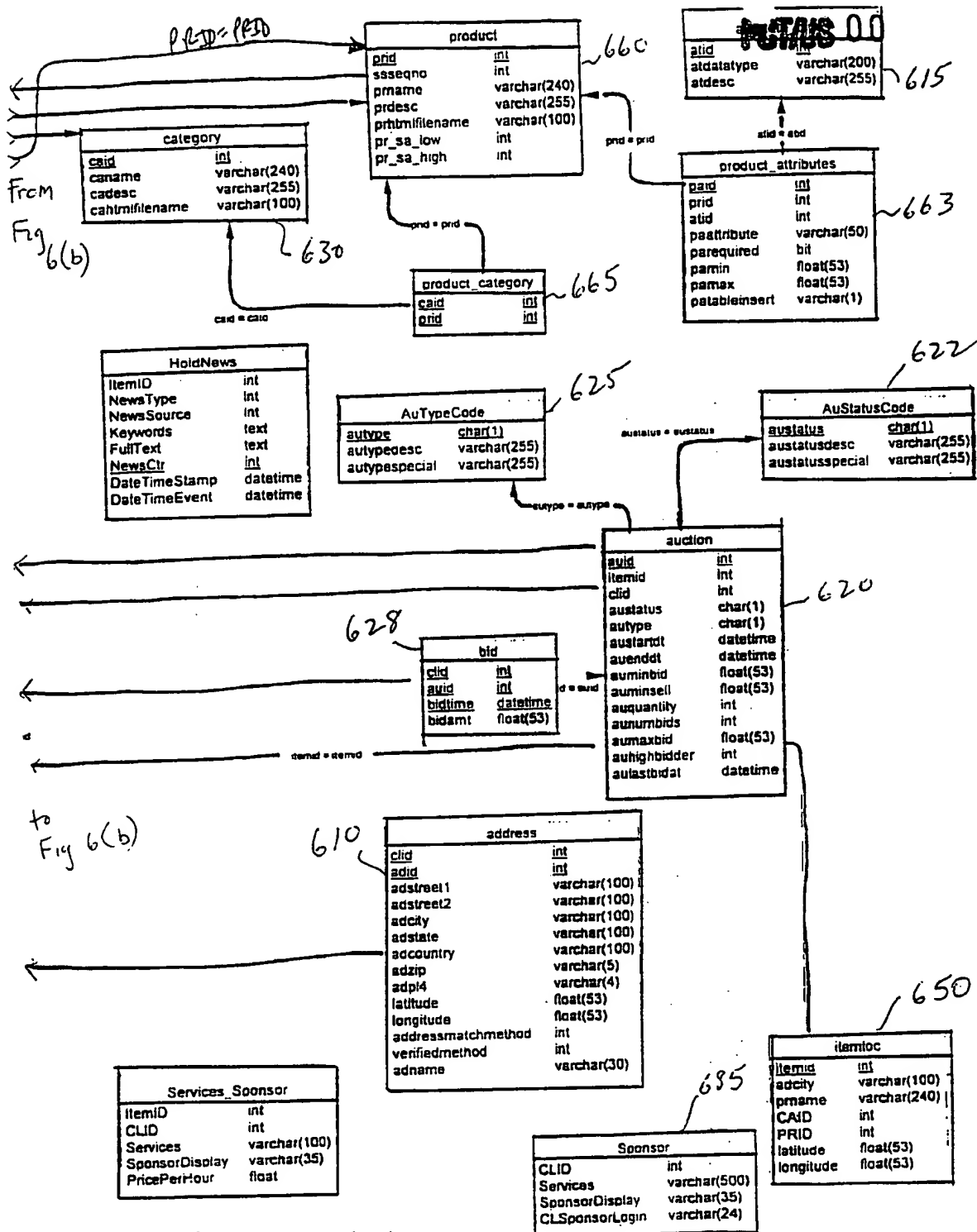


Fig. 6(a)

FIG. 6b







12/17

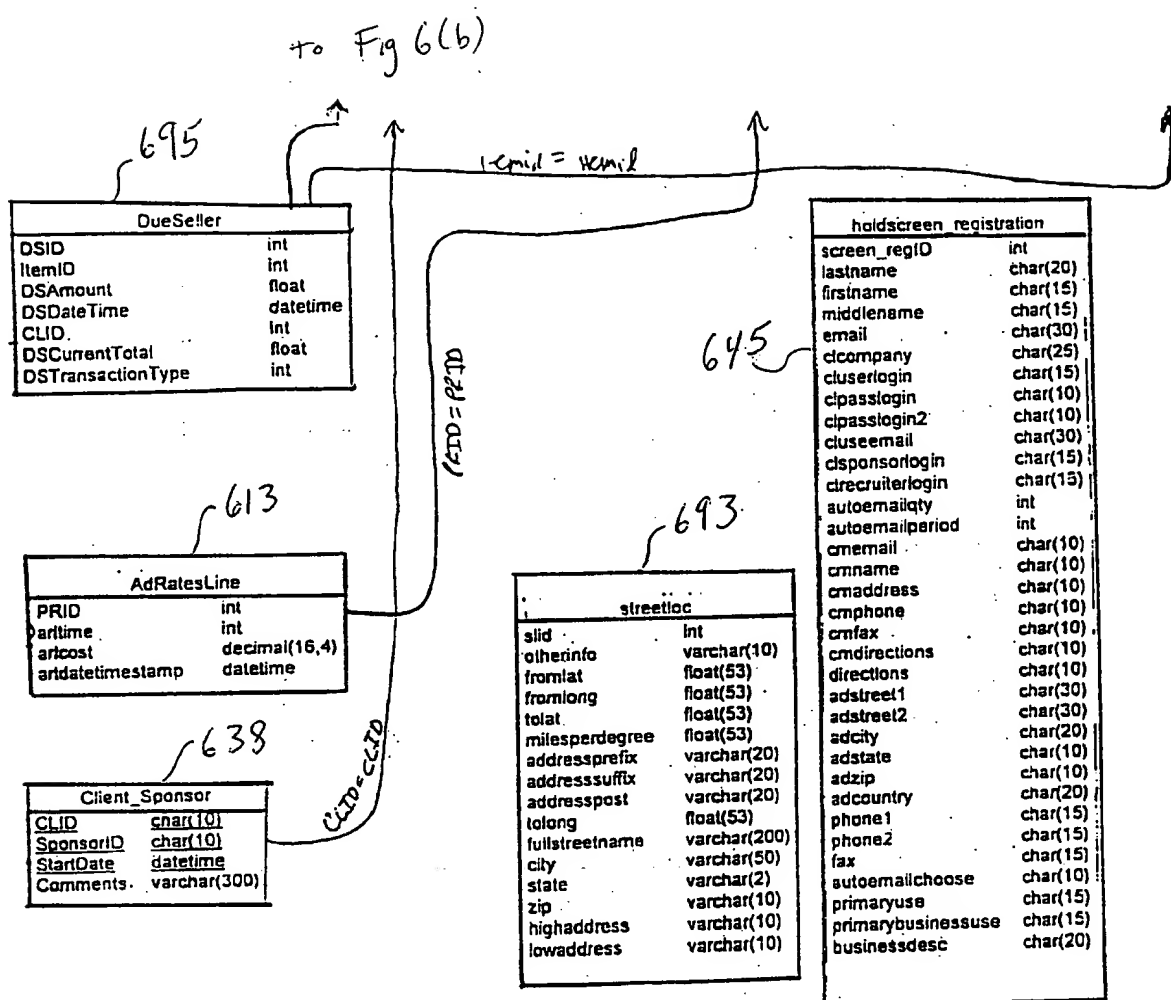


FIG. 6(d)

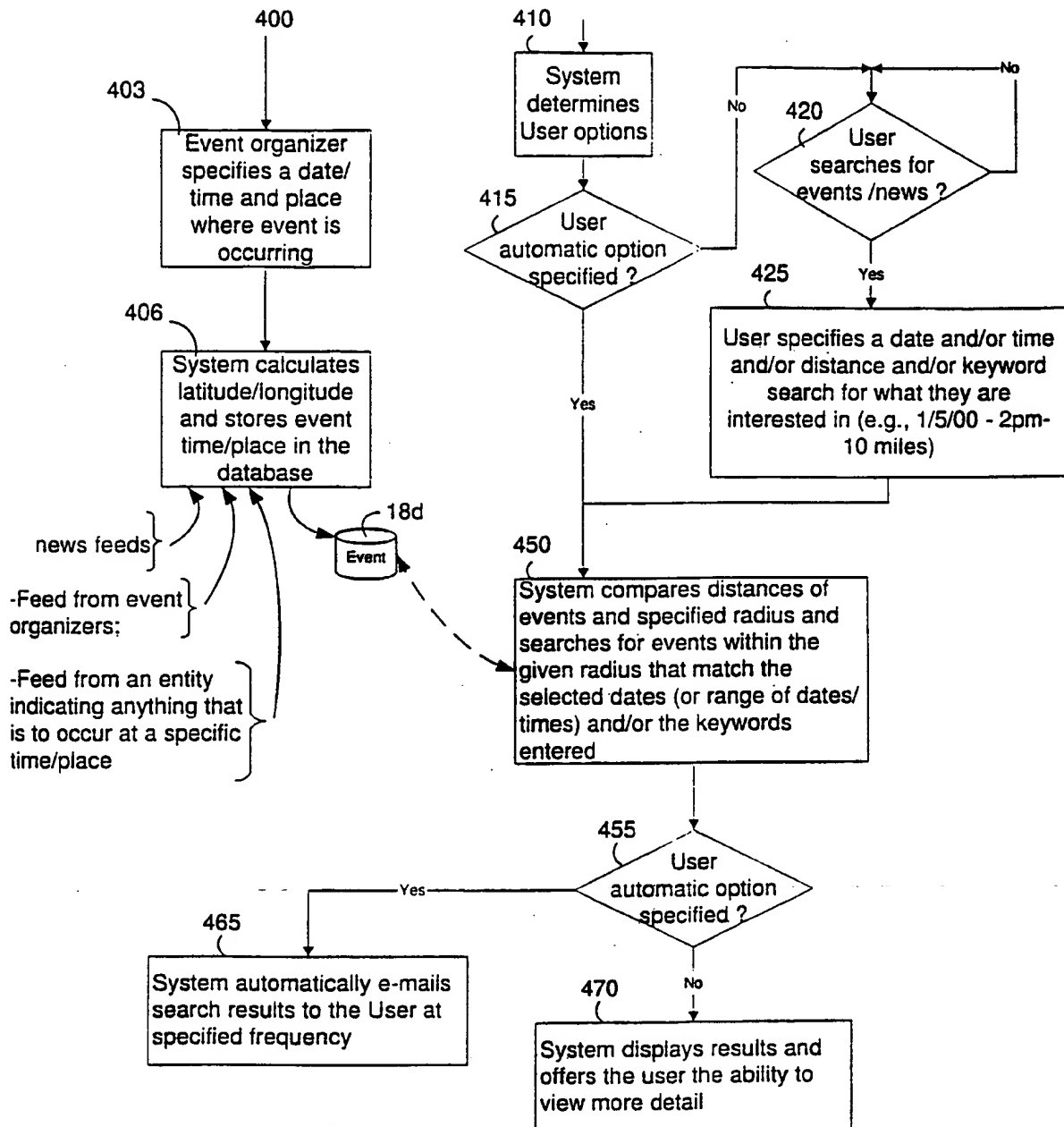


Figure 7

14/17

Where  
Life  
Is

[Place Ads](#) | [My Site](#) | [Sponsorships](#) | [Login](#) | [Change Location](#)

Search Local  Within  Miles  All Categories

[Home](#) || [Search Ads](#) || [Events/Announcements](#) || [Garage/Yard Sales](#)

You are currently Searching for *Garage/Yard Sales*

500  
↓

Located within  Within  miles

Price Between \$  and \$

Keywords

☐ All These Words ☒ Any of These Words ☐ Phrase

Available ☒ Immediately OR

☐ Enter Date Below (Optionally Enter Time)

Month  Day  Year   
01:  00:  AM

Offered By  Retail

Dates  
Open

Times Open From 01:  00:   
AM

To 01:  00:   
AM

Search

[Search Ads](#) | [Place Ads](#) | [Edit Ads](#) | [My Site](#) | [Sponsorships](#) | [About Us](#)  
[Home](#) | [Register](#) | [Login](#) | [Change Location](#)

Figure 8

15/17

700 ↘

*E-Mail Address	
*Login ID	
*Password	
*Confirm Password (Please re-enter password)	
*First Name	
*Last Name	
Company Name (if applicable)	
*Street Address	
Apt or Suite Number	
*City	
*State	
*Country	
*Zip	
Phone Number 1	
Phone Number 2	
Fax Number	
When my searches do NOT return any results, automatically email me when new items are added to the site that match these searches	<input checked="" type="checkbox"/> Yes, Send Me Emails For <input type="text"/> Days <input type="button" value="v"/> For Items Not Found
702 { When I place ads, make the following information available to other users (this can be modified later for each ad you place)	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Name <input type="checkbox"/> Address <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> Directions
My Sponsor's SponsorID is	
My primary use of PlanetZoZo is as a	Individual <input type="button" value="v"/>
Directions	
Terms of Participation	
If used for Business, what is your industry/profession?	
Describe your business	
Do you want a general description of your business that includes Name, Address, Phone Number(s) and business description to be posted at the site. The Category for these entries is "Descriptions". (Yellow Pages)	<input checked="" type="checkbox"/> Yes, Display Description Ad
704 { Hours Open      Close      Lunch Between Sun 01 <input type="button" value="v"/> : 00 <input type="button" value="v"/> TO 01 <input type="button" value="v"/> : 00 <input type="button" value="v"/> Mon 01 <input type="button" value="v"/> 01 <input type="button" value="v"/>	
Continue	

Fig. 9

WO 00/43933

16/17

800 ↓

802 {

Placing an ad for Cars

Price

Title

Year

For Sale By

Picture

Full Description

Fig. 10(a)

850 ↓

Home-- Search Vehicles Cars	
You are searching for ads in the	
Located Within	<input type="text" value="Any"/> Miles
Price	Between <input type="text"/> and <input type="text"/>
Keywords	<input type="text"/>
For Sale By	<input type="text" value="Owner"/>
Year	Between <input type="text"/> and <input type="text"/>
Date Ad Placed	<input type="text" value="All Ads"/>
<input type="button" value="Search Ads"/>	

Fig. 10(b)

900

Where Life

Place Ads My Site Sponsorships Login Change Loc

Categories

Home || Furniture || Home Furniture

Placing Ad: Home Furniture

Price:

\$

Title

Room

Living Room

Item

Set

Materials

Maple

Style

All

Condition

All

For Sale By

Retail Store

Available

Immediately  
Within 4 days

Enter Date Below  
(Optionally Enter Time)

Month

Day

Year

01:

00

AM

Date Ad Placed

All Ads

Search submit

Fig. 11

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/01852

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60

US CL : 705/14, 26, 37

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/14, 26, 37, 39

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Extra Sheet.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,032,989 A (TORNETTA) 16 July 1991, col. 11, lines 6-30.	1, 5, 7, 8 - 10, 13, 15, 17, 18, 22, 24-25
Y	US 5,283,731 A (LALONDE et al.) 01 February 1994, entirety, especially fig. 4 and col. 6, lines 42-62.	2, 10, 14, 23
Y	US 5,537,314 A (KANTER) 16 July 1996, entirety, especially col. 16, line 38 - col. 17, line 22 and col. 21, lines 9-64.	11, 12, 19, 20, 26-31
Y	US 5,799,285 A (KLINGMAN) 25 August 1998, col. 9, lines 48-59 and col. 11, lines 26-29.	11, 12, 19, 20, 26-31



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

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\*E\* earlier document published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\*

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\*

document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\*

document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

\*Z\*

document member of the same patent family

Date of the actual completion of the international search

18 APRIL 2000

Date of mailing of the international search report

09 MAY 2000

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
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Facsimile No. (703) 305-3230

Authorized officer

Allen MacDonald

Telephone No.

James R. Matthews  
(703) 305-9600

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/01852

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,819,092 A (FERGUSON et al.) 06 October 1998, col. 14, lines 20-31 and col. 31, line 60 - col. 32, line 4.	2,10,14,23, 26-31
Y	US 5,852,810 A (SOTIROFF et al.) 22 December 1998, col. 2, lines 18-46 and col. 2, line 62 - col. 3, line 3.	1,3,5,7-10, 13,15,17, 18,22,24, 25
Y,P	US 5,918,213 A (BERNARD et al.) 29 June 1999, col. 10, lines 23-60, note line 36 and col. 6, lines 30-36, col. 15, line 53 - col. 16, lines 9, and col. 30, lines 41-67.	1-31
Y,P	US 5,948,040 A (DELORME et al.) 07 September 1999, col. 32, lines 46-61, col. 57, lines 20-28; col. 64, line 19; col. 64, lines 30-44.	1-31
Y,P	US 5,960,407 A (VIVONA) 28 September 1999, entirety.	2,10,14,23
Y,P	US 5,991,739 A (CUPPS et al.) 23 November 1999, col. 6, line 19 - col. 8, line 16.	1-3,5,7-10, 13- 15,17, 18,22-25
Y,P	US 6,029,141 A (BEZOS et al.) 22 February 2000, entirety.	11,12,19, 20, 26- 31
Y,P	US 6,047,274 A (JOHNSON et al.) 04 April 2000, entirety, especially col. 12, lines 55-60.	2,10,14,23



## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US00/01852

### B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

STN USPATFULL (search terms: auction/haggle/bid/barter/trade, classified()ad/advertise  
sell/sale/buy/purchase/exchange/shop, goods/services/products/merchandise/consumable, geographic/geocode/geo-  
code/longitude/latitude/distance/locale/location/region/radius, map/atlas/address,  
commission/percentage()payment/fee/sales, royalty, dividend, shipping, handling, transport()charge/cost/payment/fee)